

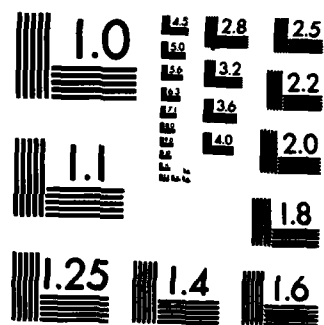
WEAPON CONTROL SYSTEMS CAREER LADDERS AFSC  
321X2/A/C/P/Q(U) AIR FORCE OCCUPATIONAL MEASUREMENT  
CENTER RANDOLPH AFB TX E R WALLACE AUG 84

1/3

F/G 5/9

NL

[illegible]



COPY RESOLUTION TEST CHART



AD-A146 572

UNITED STATES AIR FORCE

# OCCUPATIONAL SURVEY REPORT

WEAPON CONTROL SYSTEMS CAREER LADDERS

AFSC 321X2/A/C/P/Q

AFPT 90-321-495

AUGUST 1984

DTIC  
ELECTE

OCT 10 1984

B

THIS FILE COPY

OCCUPATIONAL ANALYSIS PROGRAM  
USAF OCCUPATIONAL MEASUREMENT CENTER  
AIR TRAINING COMMAND  
RANDOLPH AFB, TEXAS 78150

APPROVED FOR PUBLIC RELEASE; DISTRIBUTION UNLIMITED

84 : 10 01 049

DISTRIBUTION FOR  
AFSC 321X2/A/C/P/Q OSR AND SUPPORTING DOCUMENTS

	OSR	ANL EXT	TNG EXT	JOB INV
AFHRL/MODS	2	1m	1m	
AFHRL/ID	1	1m	1m/1h	
AFLMC/LGM	1		1	1
AFMEA/MEMD	1	1h	1	
AFMPC/MPCRPO	2			
ARMY OCCUPATIONAL SURVEY BRANCH	1			
CCAF/AYX	1			
DEFENSE TECHNICAL INFORMATION CENTER	3		3	
HQ AAC/DPAT	1		1	1
HQ AFESC/DEMG	1			
HQ AFISC/DAP	3		3	
HQ AFLC/MPCA	3		3	
HQ AFSC/MPAT	1		1	
HQ ATC/DPAE	2		1	
HQ ATC/TTQL	3		3	
HQ MAC/DPAT	1		1	
HQ MAC/DPA-ATC	1		1	
HQ PACAF/DPAL	3		3	
HQ SAC/DPAT	3		3	
HQ TAC/DPAT	1		1	
HQ TAC/DPLATC	1		1	
HQ USAF/LEYM	1		1	
HQ USAF/MPPT	3		3	
HQ USAF/DPAT	1		1	
HQ USAF/DPATC	1			
HQ USMC (CODE TPI)	1			
LMDC/AN	1			
NODAC	5	2	9	2
3400 TCHTW/TTGX (LOWRY AFB CO)	2		2	
355 TTW/MAT	2		2	
3785 FLDTG/TTFO				

m = microfiche only  
h = hard copy only

NOV 1964

Accession For	
NTIS GRA&I	<input checked="" type="checkbox"/>
DTIC TAB	<input type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justification	
By _____	
Distribution/	
Availability Codes	
Dist	Avail and/or Special
A-1	

# TABLE OF CONTENTS

	<u>PAGE NUMBER</u>
PREFACE -----	iii
SUMMARY OF RESULTS -----	iv
INTRODUCTION -----	1
Specialty Background -----	1
Objectives -----	3
SURVEY METHODOLOGY -----	4
Inventory Development -----	4
Survey Administration -----	4
Survey Sample -----	4
Data Processing and Analysis -----	5
Task Factor Administration -----	9
SPECIALTY JOBS (Career Ladder Structure) -----	14
Overview -----	14
Job Group Descriptions -----	17
Comparison of Specialty Jobs -----	33
ANALYSIS OF DAFSC GROUPS AND EVALUATION OF AFR 39-1 SPECIALTY DESCRIPTIONS -----	40
Introduction -----	40
Distribution of Skill Level Personnel Across Specialty Jobs -----	40
Job Descriptions of 3-, 5-, and 7-Skill Level Personnel -----	42
Tasks Distinguishing 5-Skill Level From 7-Skill Level Airmen -----	46
Comparison of DAFSC Job Data to AFR 39-1 Specialty Descriptions -----	46
TAFMS ANALYSIS -----	52
Job Satisfaction of TAFMS Groups -----	52
TRAINING ANALYSIS -----	58
First-Enlistment Job Descriptions -----	58
Analysis of Training Documents: Introduction -----	66
321X2 Training Documents -----	70
321X2Q Training Documents -----	72
Summary of Training Analysis -----	73
MAJCOM COMPARISON -----	87
AFS 321X2 (Slick) -----	87
AFS 321X2A and 321X2C -----	87
AFS 321X2P -----	87
AFS 321X2Q -----	87
CONUS VERSUS OVERSEAS ANALYSIS -----	93
Analysis of Write-In Comments -----	95
COMPARISON TO PREVIOUS SURVEY -----	96
IMPLICATIONS -----	98
APPENDIX A - SPECIALTY JOB DESCRIPTIONS -----	100

## PREFACE

This report presents the results of a detailed Air Force occupational survey of the Weapon Control Systems career ladders (AFS 321X2/A/C/P/Q). This study was requested by the 3400 TCHTW/TTGX. AFR 35-2 contains the authority for conducting occupational surveys. Computer products used in this report are available to operating and training officials upon request.

Chief Master Sergeant Donald J. Cochran, Inventory Development Specialist, developed the survey instrument. Sergeant Harold R. Tackett provided computer support, and Captain Martin L. Fracker and First Lieutenant Everton R. Wallace analyzed the data and wrote the final report. Lieutenant Colonel Jimmy L. Mitchell, Chief, Airman Career Ladders Analysis Section, reviewed the report and approved it for release.

Copies of this report are distributed to Air Staff sections, major commands, and other interested training and management personnel (see distribution list). ~~Additional copies may be requested by contacting the USAF Occupational Measurement Center, Attention: Chief, Occupational Analysis Branch (OAY), Randolph AFB, Texas 78150.~~

PAUL T. RINGENBACH, Col, USAF  
Commander  
USAF Occupational Measurement  
Center

WALTER E. DRISKILL, Ph.D.  
Chief, Occupational Analysis Branch  
USAF Occupational Measurement  
Center

## SUMMARY OF RESULTS

1. Survey Coverage: Two out of every three weapon control systems (AFS 321X2/A/C/P/Q) personnel were surveyed to determine current career field training needs and to evaluate the impact of Combat Oriented Maintenance Organization (COMO) on airmen's job descriptions. The final sample overall, as well as for each shredout, was representative of assigned paygrade, skill level, and command groups.

2. Job Structure: This survey identified 9 major job groups, with a total of 28 distinct job types within those groups. Groups identified closely corresponded to the major aircraft systems maintained and, thus, strongly supported the current career field structure established under AFR 39-1.

3. AFR 39-1: The 3-, 5-, and 7-skill level specialty descriptions accurately summarized the jobs of personnel in each career ladder and reflected the responsibilities of airmen at the different skill levels.

4. Training Analysis: Survey data generally supported the current 3ABR32132Q course, but raised questions about the 3ABR32132-002 (slick) course. Specifically, the slick course uses an A-7 trainer to train airmen who primarily will maintain the A-10 while seldom, if ever, maintaining the A-7. A formal evaluation of how well training on the A-7 system transfers to the A-10 may be needed to determine if changes in the course are necessary.

5. Job Satisfaction: The overall job attitudes of weapon control system first- and second-term airmen were comparable to those of airmen in other maintenance specialties. Job attitudes of career personnel (97+ months TAFMS), however, were markedly worse than those of their peers in other career fields. Further, a comparison of data from this survey to data collected in 1977 revealed a dramatic decline in the job satisfaction of career personnel during the last 6 years. Finally, A-10 personnel overall were significantly less satisfied with their jobs than other weapon control systems personnel. This dissatisfaction was apparent in the analysis of specialty jobs, the analysis of enlistment groups, and in write-in comments.

6. Implications: Most of the data collected strongly support maintaining the current career field structure. The job satisfaction data from A-10 personnel, however, may suggest that creation of an A-10 avionics specialty may be desirable. In an unrelated matter, the dramatic decline in the job satisfaction of career personnel was unexplained by data collected in this survey. The decline suggests future problems in having enough experienced personnel to supervise the technical work and provide OJT.

OCCUPATIONAL SURVEY REPORT  
WEAPON CONTROL SYSTEMS CAREER LADDERS  
(AFSC 321X2/A/C/P/Q)

INTRODUCTION

This is a report of an occupational survey of the Weapon Control Systems career ladders (AFSC 321X2/A/C/P/Q). The last survey of these career ladders was in 1977.

Specialty Background

The Weapon Control Systems career ladder was created in 1956 as AFSC 322X1 with several aircraft-specific shreds covering a variety of different weapon control systems. Since then, numerous changes have taken place with shreds added or deleted as new systems have become operational, and as old systems have been retired. In addition, separate shreds sometimes have been combined as technological advances began blurring some of the distinctions between different systems. In 1976, the 322X1 designation was changed to 321X2 with a "slick" (no shred) and six shreds: A (F-106A/B; MA-1 and ASQ-25 systems); C (F-106A/B; MA-1 and ASQ-25 subsystems); N (F-105D/F; AGS-19 system); P (F-4C/D; APQ-109 and APA-165 systems); Q (F-4E; APQ-120 system); S (A-7D); and "slick" (F-101B/F and F/TF-102A). Three years later, in 1979, the N and the S shreds were deleted and their systems consolidated under the "slick". Today, the "slick" covers the A-7D, A-10, AC-130, and F-5 aircraft. Further changes in the career field structure seem likely, given the impending disappearance of the F-4C from the active Air Force inventory, the scheduled deactivation of the F-105D/Fs, and the continuing conversion of F-106 squadrons. These changes may include eventual deletion of the A, C, and P shreds.

New airmen entering the career field attend a resident, AFSC-awarding technical training course. Currently, five courses are offered: 3ABR32132-001, 3ABR32132-002, 3ABR32132A, 3ABR32132P, and 3ABR32132Q. Obviously, each shred has its own course. Note that AFSC 32132 has two basic courses: the -002 course primarily trains active duty airmen to maintain the A-10 weapon control system (although an A-7 trainer is used in the course), while the -001 course primarily trains Air National Guard members to maintain the A-7. Table 1 displays the course length and number of graduates projected for fiscal years 1984 and 1985 for the -002, A, P, and Q courses. As the table shows, the projected number of active duty graduates for the A, P, and Q courses in FY85 is zero. In the case of the A and P courses, the reason for no projected graduates in 1985 is the removal of the F-106 and F-4C/D aircraft from the active Air Force inventory. The Q course's projected number of graduates is zero because the need for new 321X2Q Weapon Control Mechanics in 1985 will be fully met by cross training 321X2P personnel via OJT.

APPROVED FOR PUBLIC RELEASE; DISTRIBUTION UNLIMITED



Background characteristics of career field personnel are shown in Table 2. Note that while the average AQE score and education level suggest that career field personnel are of high ability, the data for most common paygrade and percent still in their first enlistment suggest a large proportion of personnel are inexperienced. This inexperience may overburden weapon control systems supervisors with a heavy OJT load.

TABLE 1  
BASIC RESIDENT COURSE DATA

COURSE	LENGTH	PROJECTED NUMBER OF GRADUATES	
		FY 1984	FY 1985
3ABR32132-002	14 weeks, 3 days	21	8
3ABR32132A	19 weeks, 1 day	12	0
3ABR32132P	20 weeks	3	0
3ABR32132Q	24 weeks	69	0

TABLE 2  
BACKGROUND CHARACTERISTICS OF WEAPON  
CONTROL SYSTEMS PERSONNEL

AVERAGE ELECTRONIC AQE SCORE: (MINIMUM REQUIRED IS ELECTRONIC 65)	82
AVERAGE EDUCATION LEVEL:	1 SEMESTER OF COLLEGE
AVERAGE LENGTH OF SERVICE:	5 YEARS
PERCENT IN FIRST ENLISTMENT:	55%
MOST COMMON SKILL LEVEL:	5-SKILL LEVEL (54%)
MOST COMMON PAYGRADE:	E-3 (40%)

### Objectives

Since the 1977 survey, several changes have taken place in weapon control systems that could affect career ladder training needs. Some of these changes concern types of aircraft worked on and types of equipment used or maintained. Another important change is the advent of the Combat Oriented Maintenance Organization (COMO) concept. A major goal of this OSR was to evaluate the impact of these changes on training needs, as well as on airman job satisfaction. Specific issues addressed included:

- (1) identifying equipment now operated or maintained by first-enlistment personnel;
- (2) generally giving special attention to jobs performed by 321X2Q personnel; and
- (3) evaluating the impact of the Combat Oriented Maintenance Organization (COMO) on 321X2/X airmen's jobs.

## SURVEY METHODOLOGY

### Inventory Development

USAF Job Inventory AFPT 90-321-495 (May 1983) was the data collection instrument used for this occupational survey. Using the survey instrument from the 1977 study as a starting point for the new task inventory, the developer and 73 subject-matter experts from 12 different bases refined and further developed the task list. In addition, 23 staff personnel directly associated with the management or training of personnel in this career field identified problem areas and questions to be addressed in analysis of the data.

### Survey Administration

From July 1983 through December 1983, Consolidated Base Personnel Offices in operational units worldwide administered the survey to DAFSC 321X2/A/C/P/Q personnel. Survey participants were selected from a computer-generated mailing list provided by the Air Force Human Resources Laboratory.

All individuals who filled out an inventory first completed an identification and biographical information section and then checked each task performed in their current job. Next, members rated the tasks on a 9-point scale showing relative time spent on each as compared to all other tasks. Ratings ranged from 1 (very small amount of time spent) to 9 (very large amount of time spent). Statistical analysis of these ratings permitted very precise estimates of the percent of time individuals spent on each task.

### Survey Sample

A representative sample of career field personnel was selected to participate in this survey. Table 3 shows how the final sample compared overall to the actual population of career field members in terms of their distribution across MAJCOMS. The table clearly shows that each MAJCOM was proportionately represented in the survey with one exception: PACAF was underrepresented (4 percent, instead of 8 percent). This underrepresentation of PACAF resulted because 22 survey booklets sent to Kadena Air Base, Japan, were never returned to the USAF Occupational Measurement Center. Since the same systems are maintained by personnel at other PACAF bases in the sample, a decision was made to proceed so as not to delay the analysis. Table 4 describes the MAJCOM distribution by shred and reflects good representation for each shred.

To further show how well the sample distribution reflected the career field, Tables 5 and 6 compare the distributions of the population versus the sample over paygrade and Total Active Federal Military Service (TAFMS) in months. Note the close correspondence of percentages between population and sample personnel depicted in both tables. The only significant difference

between distributions appears in Table 5, which shows that airmen in paygrades E-1, 2, and 3 were somewhat overrepresented in the sample. Nevertheless, this slight overrepresentation does not appear to have adversely affected the rest of the paygrade distribution and, therefore, does not seem a matter for concern.

### Data Processing and Analysis

Once job inventories are returned from the field, task responses and background information are optically scanned. Other biographical information (such as name, base, AUTOVON extension) are keypunched onto disks and entered directly into the computer. Once both sets of data are in the computer, they are merged to form a complete case record for each respondent. Comprehensive Occupational Data Analysis Programs (CODAP) are then used to analyze the data.

CODAP produces job descriptions for groups of respondents based on their ratings of specific tasks. Job descriptions include DAFSC groups, TAFMS groups, and MAJCOM groups. These descriptions provide information on percent members performing and average relative time spent on each task. In addition to these job descriptions, the computer produces summaries that show how members of each group responded to each background item. Background items identify characteristics of the group, such as DAFSCs represented, time in career field, Total Active Federal Military Service, experience in the various functional areas, and equipment operated.

The CODAP automated job clustering program organizes individual jobs into similar units of work by comparing each individual job description in the sample to every other job description in terms of tasks performed and the relative amount of time spent on each task in the job inventory. The automated system locates those two job descriptions with the most similar task ratings and combines them into a composite job description. In successive stages, the system adds more members to the initial group or forms new groups. The resulting analysis of job groups identifies the number and characteristics of jobs within the career ladder.

The basic group used in the clustering process is the Job Type. A job type is a group of individuals who perform many of the same tasks and spend similar amounts of time performing them. When several job types are similar, they group together as Clusters. Sometimes, two or more clusters may be similar to each other but different from other clusters in the sample. If so, then these similar clusters may be referred to collectively as a Functional Area. When a job is too unique to group into any cluster, it becomes an Independent Job Type.

This kind of information is used to evaluate utilization policy and the variation in jobs within the specialty. Such data may also have implications when used with other types of information, for career field documents and training programs. Such other types of information include independent ratings by supervisors on tasks, which are referred to as Task Factors.

**TABLE 3**  
**COMMAND DISTRIBUTION OF 321X2/X SURVEY SAMPLE**

<u>MAJCOM</u>	<u>PERCENT OF ASSIGNED</u>	<u>PERCENT OF SAMPLE</u>
TAC	69	72
USAFE	12	11
PACAF	8	4
ATC	6	7
AFSC	2	3
MAC	2	2
OTHER	*	1

Total Assigned: 1,868  
Total Eligible for Survey: 1,750\*\*  
Total Sampled: 1,220  
Percent of Assigned in Sample: 65%  
Percent of Eligible in Sample: 70%

\* Less than 1 percent

\*\* Excludes those with less than 6 weeks on the job,  
in training, enroute PCS, and retiring

TABLE 4

## MAJCOM DISTRIBUTION BY CAREER LADDER

<u>MAJCOM</u>	<u>PERCENT OF 321X2 (SLICK)</u>		<u>PERCENT OF 321X2P</u>		<u>PERCENT OF 321X2Q</u>	
	<u>ASSIGNED</u>	<u>SAMPLE</u>	<u>ASSIGNED</u>	<u>SAMPLE</u>	<u>ASSIGNED</u>	<u>SAMPLE</u>
TAC	53	51	68	72	63	66
USAFE	17	16	5	5	18	17
MAC	11	11	0	0	0	0
ATC	7	7	17	14	5	5
AFSC	5	6	9	9	1	5
PACAF	3	3	**	**	13	7
AAC	4	4	0	0	0	0
AFLC	0	0	**	**	**	**
OTHER	0	2*	0	0	0	0

<u>MAJCOM</u>	<u>PERCENT OF 321XA</u>		<u>PERCENT OF 321X2C</u>	
	<u>ASSIGNED</u>	<u>SAMPLE</u>	<u>ASSIGNED</u>	<u>SAMPLE</u>
TAC	95	94	89	86
ATC	5	6	11	14
OTHER	0	0	0	0

\* 2 percent of the DAFSC 321X2 sample did not indicate MAJCOM to which they were assigned

\*\* Less than 1 percent

TABLE 5

PAYGRADE REPRESENTATION OF TOTAL 321X2/X  
SURVEY SAMPLE

<u>PAYGRADE</u>	<u>PERCENT OF ASSIGNED</u>	<u>PERCENT OF SAMPLE</u>
AIRMAN	37	43
E-4	23	20
E-5	20	20
E-6	13	11
E-7	7	6

TABLE 6

TAFMS DISTRIBUTION OF TOTAL 321X2/X  
SURVEY SAMPLE

<u>MONTHS TAFMS</u>	<u>PERCENT OF ASSIGNED</u>	<u>PERCENT OF SAMPLE</u>
1-48	51	55
49-96	19	18
97+	30	27

### Task Factor Administration

The Air Force occupational measurement program has two purposes in addition to that of determining what tasks airmen perform in their jobs. One is to measure how difficult those tasks are for an average airman to learn. The other is to determine how much emphasis should be placed on each task in an initial training program (including both resident and nonresident training) for new airmen. To accomplish these two additional objectives, selected subject-matter experts complete either a task difficulty or training emphasis job inventory booklet. Normally, only 7- or 9-skill level personnel are sent these task factor booklets. Sometimes, however, there are too few of these senior personnel available in the career ladder to achieve an adequate number of raters. When this situation occurs, some of the more experienced 5-skill level airmen may be added to the rater sample. In this study, adequate numbers of senior personnel were available in each of the career ladders, except the 321X1P specialty. As a result, several 5-skill level raters were included in that specialty for both task difficulty and training emphasis.

Tables 7 through 8 and Table 10 compare the distributions of assigned 7-skill level personnel with that of task factor raters across MAJCOMs within each career ladder. Table 9 compares the 321X2P rater distribution with the distribution of 5- and 7-skill level personnel. Note that the rater distributions compare favorably to those of assigned personnel in the 321X2A/C and 321X1Q specialties. In the "slick" specialty (Table 7), several discrepancies appear, but are largely a function of the small number of personnel sampled. That is, when only one or two personnel failed to return a completed book, the effect on the displayed percentages was rather drastic. Essentially, the same point can be made about the 321X2P distributions in Table 9. In addition, some of the magnitude of the discrepancies in Table 9 is due to the inclusion of all 5-skill level personnel in the "assigned" column, while only senior 5-skill level airmen were actually included as raters. In any event, each of the tables indicates (with the exception of PACAF in the "slick" specialty) all commands represented in the specialties were also represented in the respective rater samples. Consequently, the validity of the rater samples should not be seriously affected by any of the observed distribution problems.

One additional comment regarding the "slick" raters seems in order. Both the task difficulty and training emphasis rater samples included airmen who worked on the A-10 system, as well as those who worked on the F-5 system. Further, A-10 raters outnumbered F-5 raters by about 3 to 1. This ratio reflects the proportion of career ladder personnel who maintain the A-10 versus the F-5 system (see the SPECIALTY JOBS section).

Task Difficulty: Task difficulty is defined as the length of time an average airman needs to learn to perform a task. Given this definition, senior career ladder NCOs rated all tasks in the job inventory that applied to their specialty. Tasks were rated on a scale of 1 (not difficult) to 9 (very difficult). The numbers of raters in each career ladder were as follow:



321X2	- 17
321X2A/C	- 62
321X2P	- 13
321X2Q	- 42

To ensure the ratings were meaningful, each NCO's ratings were compared to those of every other NCO in the same specialty. A statistical measure of their agreement was computed and indicated NCOs within each group had rated tasks similarly. These measures were calculated from standardized components of variance of group means. The agreement index for each group is given below (an index of 1.0 would have indicated perfect agreement):

321X2	- .68*
321X2A/C	- .93
321X2P	- .83
321X2Q	- .95

\* Although this measure ( $R_{kk}$ ) was comparatively low, the  $R_{11}$  measure of individual rater reliability was acceptable ( $R_{11} = .26$ ). Thus, the low  $R_{kk}$  value was mainly a function of the small number of raters.

Ratings were adjusted so tasks of average difficulty had ratings of 5.0. Because these ratings were collected independently for each specialty, they could not be combined to yield a job difficulty index applicable to the entire career field. As a result, job difficulty indexes for job groups found in this survey are not discussed in this report.

**Training Emphasis:** Separate groups of NCOs within each career ladder rated the emphasis needed in training first-term airmen on each task using a scale of 0 to 9. Again, a statistical measure of their agreement was computed and indicated that rates within each group had rated tasks similarly, indicating a consensus as to what should be trained. The agreement indexes are shown below with the number of raters in each group shown in parentheses:

321X2	- .84 (N=18)
321X2A/C	- .97 (N=68)
321X2P	- .92 (N=17)
321X2Q	- .97 (N=40)

The average rating for tasks varied from one career ladder to another. Those average ratings were as follows:

321X2	- 1.37
321X2A/C	- 2.54
321X2P	- 3.35
321X2Q	- 3.20

As with task difficulty ratings, training emphasis ratings in this study cannot be compared across 321X2X career ladders. (Of course, training emphasis ratings normally should only be used to compare tasks within a career ladder anyway.)

TABLE 7

## MAJCOM DISTRIBUTION OF 321X2 (SLICK) TASK FACTOR RATERS

<u>MAJCOM</u>	<u>PERCENT OF 7-SKILL LEVELS ASSIGNED</u>	<u>PERCENT OF TASK DIFFICULTY RATERS (N=17)</u>	<u>PERCENT OF TRAINING EMPHASIS RATERS (N=18)</u>
TAC	51	35	50
USAFE	22	11	6
MAC	7	24	28
ATC	7	18	6
PACAF	5	0	0
AFSC	4	6	10
AAC	4	6	0

TABLE 8

## MAJCOM DISTRIBUTION OF 321X2A/C TASK FACTOR RATERS

<u>MAJCOM</u>	<u>PERCENT OF 7-SKILL LEVELS ASSIGNED</u>	<u>PERCENT OF TASK DIFFICULTY RATERS (N=62)</u>	<u>PERCENT OF TRAINING EMPHASIS RATERS (N=68)</u>
TAC	95	96	97
ATC	5	4	3
OTHER	0	0	0

TABLE 9

## MAJCOM DISTRIBUTION OF 321X2P TASK FACTOR RATERS

<u>MAJCOM</u>	<u>PERCENT OF 5- AND 7-SKILL LEVELS ASSIGNED (N=93)</u>	<u>PERCENT OF TASK DIFFICULTY RATERS (N=13)</u>	<u>PERCENT OF TRAINING EMPHASIS RATERS (N=17)</u>
TAC	53	38	35
ATC	28	31	24
AFSC	9	15	12
USAFE	9	15	29
OTHER	1	1	0

TABLE 10

## MAJCOM DISTRIBUTION OF 321X2Q TASK FACTOR RATERS\*

<u>MAJCOM</u>	<u>PERCENT OF 7-SKILL LEVELS ASSIGNED</u>	<u>PERCENT OF TASK DIFFICULTY RATERS (N=42)</u>	<u>PERCENT OF TRAINING EMPHASIS RATERS (N=40)</u>
TAC	47	43	43
USAFE	26	21	30
PACAF	17	21	10
ATC	8	12	8
AFSC	2	2	8

\* Percentages may not add up to 100 due to rounding

## SPECIALTY JOBS (Career Ladder Structure)

One of the most important functions of the USAF Occupational Analysis Program is to identify the variety of jobs performed within a career field, as well as how these jobs relate to one another. The diversity of jobs is important to both the USAF Personnel Classification System and training programs. If jobs are diverse or specialized, then shreds may serve as an effective force management tool. If, on the other hand, jobs have a great deal in common, shreds and their attendant channelized training may unnecessarily burden both the classification and training systems.

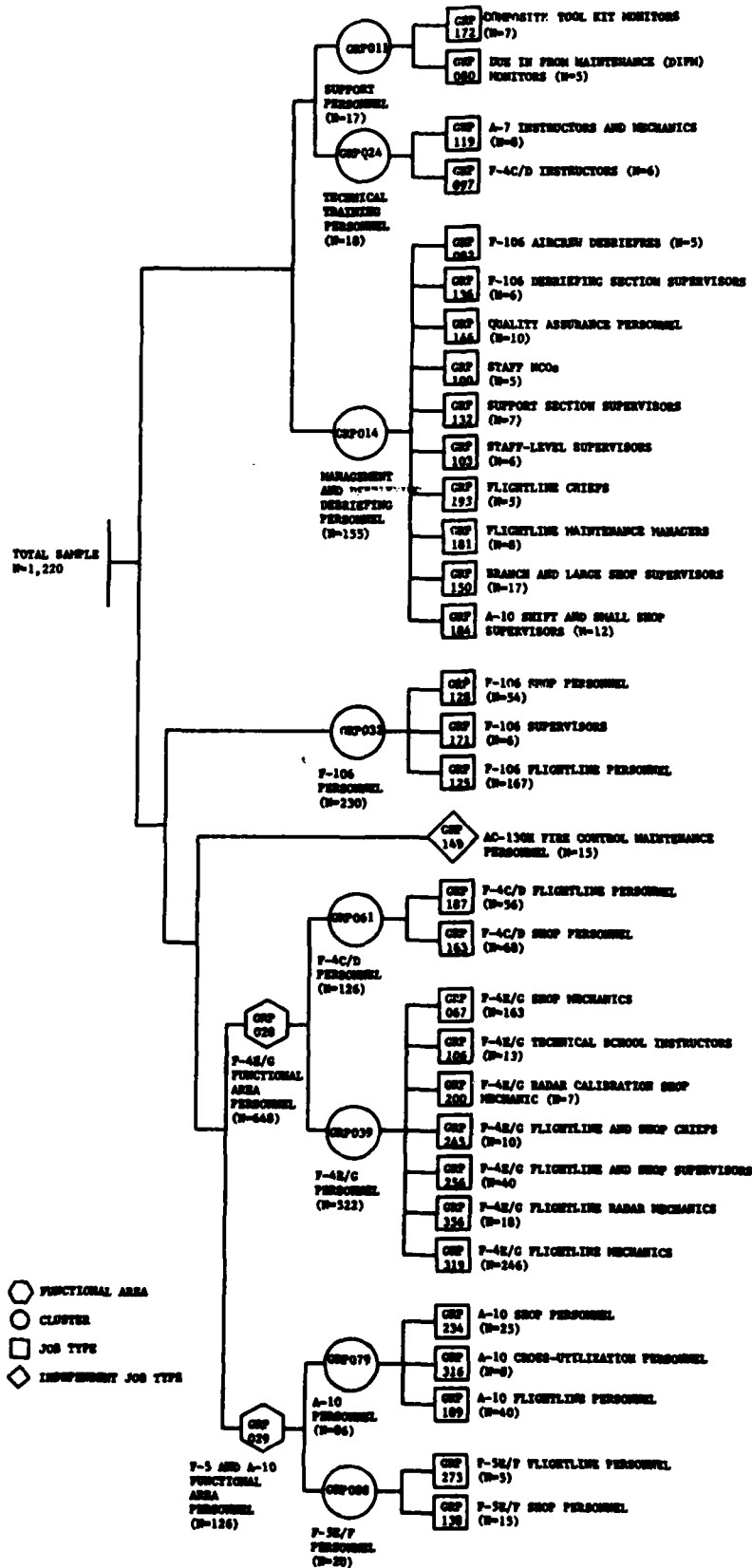
Additionally, job information is used to analyze career progression patterns and career field documents (primarily AFR 39-1 Specialty Descriptions, Specialty Training Standards, and basic course Plans of Instruction) to identify needed changes. Job data are also used to identify morale (job satisfaction) problems, noteworthy trends, and other issues needing management attention.

### Overview

Analysis of Weapon Control Systems survey results identified 2 functional areas, 8 clusters containing a total of 31 job types, and 1 independent job type. Figure 1 illustrates how these job groups related to each other. Following is a list of the groups identified:

- I. F-5 AND A-10 FUNCTIONAL AREA (GRP029, N=126)
  - A. F-5E/F Personnel (GRP088, N=20)
    - 1. F-5E/F Flightline Personnel (GRP273, N=5)
    - 2. F-5E/F Shop Personnel (GRP138, N=15)
  - B. A-10 Personnel (GRP079, N=86)
    - 1. A-10 Flightline Personnel (GRP189, N=40)
    - 2. A-10 Cross-Utilization Personnel (GRP316, N=8)
    - 3. A-10 Shop Personnel (GRP234, N=25)
- II. AC-130H FIRE CONTROL MAINTENANCE PERSONNEL (GRP149, N=15)
- III. F-106 PERSONNEL (GRP032, N=230)
  - A. F-106 Flightline Personnel (GRP125, N=167)
  - B. F-106 Shop Personnel (GRP128, N=54)
  - C. F-106 Supervisors (GRP171, N=6)

FIGURE 1  
CAREER FIELD STRUCTURE  
AFS 32122X



**IV. F-4 FUNCTIONAL AREA (GRP028, (N=648)**

**A. F-4C/D Personnel (GRP061, N=126)**

1. F-4C/D Flightline Personnel (GRP187, N=56)
2. F-4C/D Shop Personnel (GRP163, N=68)

**B. F-4E/G Personnel (GRP039, N=522)**

1. F-4E/G Flightline Mechanics (GRP319, N=246)
2. F-4E/G Flightline Radar Mechanics (GRP356, N=18)
3. F-4E/G Radar Calibration Shop Mechanics (GRP200, N=7)
4. F-4E/G Shop Mechanics (GRP067, N=163)
5. F-4E/G Flightline and Shop Supervisors (GRP256, N=40)
6. F-4E/G Flightline and Shop Chiefs (GRP245, N=10)
7. F-4E/G Technical School Instructors (GRP106, N=13)

**V. SUPPORT PERSONNEL (GRP011, N=17)**

- A. Composite Tool Kit Monitors (GRP172, N=7)
- B. Due In From Maintenance (DIFM) Monitors (GRP080, N=5)

**VI. TECHNICAL TRAINING PERSONNEL (GRP024, N=18)**

- A. A-7 Instructors and Mechanics (GRP119, N=8)
- B. F-4C/D Instructors (GRP097, N=6)

**VII. MANAGEMENT AND DEBRIEFING PERSONNEL (GRP014, N=155)**

- A. A-10 Shift and Small Shop Supervisors (GRP184, N=12)
- B. Branch and Large Shop Supervisors (GRP150, N=17)
- C. Flightline Maintenance Managers (GRP181, N=8)
- D. Flightline Chiefs (GRP193, N=5)
- E. Support Section Supervisors (GRP132, N=7)
- F. Staff-Level Supervisors (GRP103, N=6)
- G. Staff NCOs (GRP100, N=5)
- H. Quality Assurance Personnel (GRP146, N=10)
- I. F-106 Aircrew Debriefers (GRP082, N=5)
- J. F-106 Debriefing Section Supervisors (GRP136, N=6)

Ninety-eight percent of the respondents to this survey fell into the above job groups. The remaining 2 percent (26 people) included several individuals working in classified areas as well as a few others whose jobs were, for various reasons, unlike any other in the sample.

Of the 9 major job groupings, the F-4E/G cluster was the largest by far, accounting for 43 percent of the entire sample. Nearly all of the airmen in this cluster worked on the F-4E weapon control system and over a third maintained the F-4G system as well. By contrast, the smallest group in the

sample was the Support Cluster made up of Composite Tool Kit Monitors and Due In From Maintenance Monitors. Perhaps not surprisingly, these support personnel had the poorest job satisfaction in the sample, while that of the F-4E/G group was among the best.

Overall, the job groups identified accurately reflected the formal career field structure. Airmen working in different shreds performed distinctly different jobs, while those working in the same shreds performed relatively similar jobs. An interesting exception to this finding was the AC-130H personnel who possessed the "slick" AFS but did not group with other "slick" personnel (those working on the A-10 and F-5). Nevertheless, A-10 and F-5 personnel did group together. Thus, survey data generally appear to support continuation of the present shredded system.

Significantly, this analysis of career field jobs revealed less than 1 percent of the sample working on the A-7D or A-7K weapon control systems. Yet, 10 percent of all surveyed personnel assigned to the Lowry Technical Training Center were providing or directly supporting training on the A-7D system. While this finding may raise some concerns about how well the technical school is preparing some airmen for their first jobs, other considerations may justify a continued emphasis on the A-7. For example, the A-7 system may provide good generic training for other systems. A more detailed examination of this issue is presented in the training analysis section of this report.

Finally, results of the survey generally indicated that, within a particular shred, there were normally two basic kinds of jobs: flightline maintenance in aircraft generation squadrons, and shop maintenance in component repair squadrons. The basic flightline job consisted of removing and replacing malfunctioning equipment, as well as performing a variety of cross-utilization training tasks. As expected, the shop job centered around repairing the components turned in by flightline personnel.

While these two generic job types appeared throughout the entire sample, there were variations in the F-4E/G and the F-106 job clusters. In the F-4E/G cluster, besides the basic flightline and shop job groups, there were also some more specialized job types. Within the F-106 cluster, a variation of the flightline job appeared in which, as would be expected, personnel worked in fighter interceptor squadrons instead of aircraft generation squadrons.

### Job Group Descriptions

I. F-5 AND A-10 FUNCTIONAL AREA (GRP029, N=126). Most members of the 321X2 "slick" specialty fell into this functional area. While these personnel tended to specialize in maintaining either A-10 or F-5 weapon control systems, they also performed several tasks in common. These common tasks generally were the same, regardless of the specific aircraft maintained and included:



- research technical orders to identify components or items of equipment
- pack or unpack WCS components
- perform soldering techniques applicable to WCS
- remove or install WCS fuses, light bulbs, or tubes
- inspect aircraft for ground safety such as placement of wheel chocks or pins
- remove or install WCS panels or doors
- repair aircraft wiring
- remove or install WCS wiring terminals or connector plugs
- remove or install desiccantors
- remove or install WCS solderless connectors or terminals

Besides the A-10 and the F-5, small numbers of people in this functional area also maintained weapon control systems on the A-7D and on the F-4C, D, and G. These latter personnel (there were nine of them) worked in combined shops employing personnel in the "slick", P, and Q shreds. Since the A-10 workload was very small in these shops, the "slick" personnel were routinely cross-utilized on F-4 aircraft.

As implied above, there were two major clusters of jobs in this functional area. Personnel in one cluster primarily maintained the F-5 weapon control system, while personnel in the other specialized in the A-10.

A. F-5E/F Personnel (GRP088, N=20). Of the two clusters, this one was the smaller, accounting for only 16 percent of the entire functional area. All personnel in this group maintained the F-5E weapon control system and over two-thirds also maintained the F-5F. Further, about a third of the group maintained the A-10 system in addition to the two F-5 systems. Specific tasks members of this cluster performed included:

- perform operational checks on F-5E/F WCS radar receiver transmitters
- perform operational checks on F-5E/F WCS radar processors
- perform operational checks on F-5E/F WCS radar indicators
- remove or install F-5E/F WCS radar processors
- remove or install F-5E/F WCS radar receiver/transmitters
- perform built-in tests (BIT) of F-5E/F lead computing optical systems
- perform BIT of F-5E/F radar systems
- remove or install F-5E/F WCS radar indicators
- isolate malfunctions within F-5E/F WCS radar receiver/transmitters
- perform operational checks on F-5E/F WCS radar antennas
- isolate malfunctions within F-5E/F WCS radar processors

Three-fourths of the members of this cluster worked in shops (component repair squadrons). The remaining one-fourth worked on the flightline in aircraft generation squadrons where they performed a variety of

cross-utilization training tasks, in addition to their primary jobs. This distinction between shop versus flightline was clear enough for the two kinds of groups to appear as distinguishable job types.

1. F-5E/F Flightline Personnel (GRP273, N=5). As indicated, these airmen performed a number of cross-utilization training tasks, in addition to maintenance of weapon control system equipment. Some of these tasks were:

- walk wings or tails during aircraft towing operations
- operate aerospace ground equipment
- position or remove aircraft chocks
- jack or level aircraft
- launch or recover aircraft
- perform preflight inspections
- perform thru flight or post flight inspections
- static ground aircraft

Airmen in this job group were fairly junior, averaging only two and one-half years of military service. Further, all but one of these airmen held the 5-skill level, while the remaining airmen held the 3-skill level.

2. F-5E/F Shop Personnel (GRP138, N=15). While these shop personnel were relatively junior members of the career field, they were more senior than F-5E/F flightline personnel, averaging 3 years and 3 months of military service. Among tasks unique to this group were:

- align F-5E/F WCS radar processors
- align F-5E/F WCS radar receiver transmitters
- bench check F-5E/F WCS radar indicators
- bench check F-5E/F WCS radar processors
- bench check F-5E/F WCS radar receiver transmitters
- isolate malfunctions within F-5E/F WCS radar indicators
- isolate malfunctions within F-5E/F WCS radar receiver transmitters
- isolate malfunctions within F-5E/F WCS radar processors
- bench check F-5E/F WCS optical display units
- bench check F-5E/F WCS radar antennas
- bench check F-5E/F WCS radar set controls
- isolate malfunctions within F-5E/F lead computing gyroscopes

Because these members were assigned exclusively to shops and did not work on the flightline, they performed few, if any, cross-utilization training tasks.

B. A-10 Personnel (GRP079, N=86). Members of this job group made up the largest portion of the 321X2 "slick" career ladder. All of these personnel maintained the A-10 weapon control system while 8 percent of the

group worked in combined organizations where they maintained the F-4C, D, and E as well. About half of those maintaining the F-4 system worked in aircraft generation squadrons and the other half worked in component repair squadrons.

Within this cluster were three job types. Two of these were variations of the basic flightline job while the third was a shop maintenance job.

1. A-10 Flightline Personnel (GRP189, N=40). Of the two flightline job types, this was the largest. Tasks performed by members of this group centered around maintaining A-10 heads-up displays and TV monitors. In addition, these personnel performed several cross-utilization tasks, as was typical of flightline personnel in this study.

Personnel in this group averaged  $3\frac{1}{2}$  years of military service. Over three-fourths possessed the 5-skill level DAFSC.

2. A-10 Cross-Utilization Personnel (GRP316, N=8). In contrast to the previous group, these flightline personnel were significantly more senior, with an average of  $7\frac{1}{2}$  years of military service. Further, half of these personnel held the 7-skill level DAFSC. Contrary to expectation, these senior personnel spent much more of their time performing cross-utilization tasks than the previous, more junior group. In fact, members of this group spent more time performing cross-utilization tasks than they did maintaining A-10 weapon control systems.

Why the configuration of tasks for this group should differ so dramatically from that of the previous group is fairly straightforward. Comparison of the two groups on the more than 280 background characteristics studied in this survey revealed only one major difference (besides levels of experience and skill): All members of this group were assigned overseas, while members of the previous group were predominantly assigned to the continental United States. Telephone contacts with A-10 personnel in this job group indicated that overseas units often have only two or three Weapon Control Systems Mechanics assigned, while CONUS units often have eight or nine mechanics assigned. Thus, at an overseas unit, all personnel normally must share in performing cross-utilization tasks, whereas such sharing generally is not needed in CONUS units.

Further, in overseas units, supervisors are more likely to assign a junior mechanic to perform maintenance on the highly reliable weapon control system of than to assign a more experienced mechanic to do so. The reason for this tendency is that junior mechanics need maintenance experience as part of their overall OJT program, yet the A-10 system seldom breaks down, thereby providing opportunities for such experience. As a result, when the A-10 system does need repair, junior personnel are normally dispatched to do the job ahead of senior personnel who already have adequate experience.

Thus, the small number of Weapon Control Systems Mechanics assigned overseas combined with the paramount need of junior personnel for experience maintaining the A-10 system resulted in the relatively senior personnel in this overseas job group concentrating on cross-utilization tasks.

3. A-10 Shop Personnel (GRP234, N=25). This group of shop maintenance personnel averaged less time in the military than either of the two flightline groups (1 year and 9 months). In addition, over 40 percent of these airmen were still in their first few months of service as 3-skill levels. Tasks these junior airmen performed centered around repairing and adjusting TV monitors and heads-up display components sent in from the flightline.

II. AC-130H FIRE CONTROL MAINTENANCE PERSONNEL (GRP149, N=15). Members of this independent job type were the only maintenance-oriented 321X2 "slick" airmen in the survey sample who fell outside the F-5 and A-10 functional area discussed above. In that sense, they were working outside the mainstream of the "slick" career ladder. They were also outside the career ladder's mainstream in another sense: the same people who performed shop maintenance generally also performed flightline maintenance along with cross-utilization tasks. Examples of the tasks performed by all or most of these personnel included:

- remove or install AC-130H WCS AN/APQ 150 radar signal processors
- safety wire WCS components or fasteners
- perform AC-130H WCS operational test program routines
- isolate malfunctions within AC-130H WCS AN/ASN-91 tactical computer systems
- remove or install AC-130H WCS AN/ASN-91 computers
- perform minimum performance checks on AC-130H WCS AN/ASN-91 computers
- isolate malfunctions within AC-130H WCS AN/ASN-91 computer assemblies
- isolate malfunctions within AC-130H WCS AN/AVQ-21 pilots display units
- isolate malfunctions with AC-130H WCS AN/AVQ-21 signal data processors
- transport test equipment or units to or from flightline
- launch or recover aircraft
- remove or replace radomes
- operate aerospace ground equipment
- remove or install aircraft panels

As the above tasks suggest, personnel in this job group performed a wide range of many different tasks on the AC-130H fire control system. This range of tasks may indicate that AC-130H system mechanics should be experienced airmen able to handle the variety of tasks effectively. In fact, members of this job group were fairly experienced. They averaged over five years of military service; half were staff sergeants or higher; four out of five held either the 5- or 7-skill duty AFSC; and two out of three held either the 5- or 7-skill level primary AFSC.

III. F-106 PERSONNEL (GRP032, N=230). Personnel in this cluster maintained or supervised maintenance of the F-106 weapon control system. Nearly all the members in this job group were assigned to bases in the CONUS. Within the cluster were three distinguishable types of jobs: flightline mechanics, shop mechanics, and flightline maintenance supervisors.

A. F-106 Flightline Personnel (GRP125, N=167). Flightline maintenance personnel comprised about three-fourths of the entire F-106 cluster. As would be expected, all members of this job group held the A-shred (flightline maintenance). About equal numbers of these personnel worked in aircraft generation squadrons and in the flightline maintenance sections of fighter interceptor squadrons. Those working in an aircraft generation squadron were all located at one base.

F-106 flightline personnel, like other flightline mechanics, primarily performed troubleshooting, aligning, and remove and replace tasks in addition to a variety of cross-utilization tasks. Among these tasks were:

- correct malfunctions within F-106 subsystems by removing faulty line replaceable units (LRU) and installing serviceable LRU
- align F-106 radar subsystem attack displays
- set up and operate F-106 fault detection testers
- align F-106 radar subsystem automatic gain control angle track and HOM
- perform F-106 operational checks, such as short system ground checks and computer routines
- align F-106 radar subsystem antenna track drives
- isolate malfunctions to F-106 radar subsystem attack display LRU
- remove or install F-106 computer system LRUs
- perform operational checks on F-106 radar subsystem attack LRU
- isolate malfunctions to F-106 radar subsystem reception and display LRU

Airmen in this job group averaged 5 years and 3 months of service and, for the most part, held the 5-skill level DAFSC.

B. F-106 Shop Personnel (GRP128, N=54). These shop personnel generally were more experienced than the flightline people just discussed, averaging 8 years of military service. Paralleling the flightline group, these personnel worked in either the shop sections of fighter interceptor squadrons or in component repair squadrons. All the personnel working in component repair squadrons were located at one base.

Tasks performed by personnel in this group were similar to tasks performed in any weapon control system maintenance shop and included:

bench check F-106 radar subsystem automatic gain  
 control, angle track, and HOM LRU  
 correct malfunctions within F-106 radar subsystem  
 attack display LRU  
 bench check F-106 radar subsystem antenna drive LRU  
 isolate malfunctions within F-106 radar subsystem  
 antenna drive LRU  
 isolate malfunctions within F-106 radar subsystem  
 search, supersearch, and hand control LRU  
 bench check F-106 radar subsystem rapid tune/paramp or  
 automatic frequency control LRU  
 isolate malfunctions within F-106 computer subsystem LRU  
 correct malfunctions within F-106 radar subsystem antenna  
 drive LRU

C. F-106 Supervisors (GRP171, N=6). These six 7-skill level personnel were the most senior members of this cluster with an average of over 16 years in the service. Unlike other flightline maintenance supervisors, as well as all the shop maintenance supervisors, these personnel did not group with the mechanics they supervised. While they did perform a number of weapon control system maintenance tasks on occasion, most of their time was spent supervising subordinates and conducting OJT.

Comment on the Future of the F-106 Job Cluster. At the time this survey was conducted, the F-106 job cluster was in a state of change, as F-106 squadrons were being phased out of the active duty Air Force. To illustrate, the data reported above were collected from six different bases, two of which no longer had active duty F-106 squadrons by the time this report was written. In addition, the squadrons at a third base were scheduled to be phased out by the end of Fiscal Year 1984. As a result, the F-106 job cluster was about 40 percent smaller at the time this report was published than it was just a few months earlier when the data were first collected. Even further reductions are expected during the next 2 years. Since some change in how jobs are configured may be expected as the size of both the mission and manning decrease, caution should be used in extending the preceding job descriptions to F-106 jobs in the immediate future.

IV. F-4 FUNCTIONAL AREA (GRP028, N=648). Over half of the career field sample fell into this group, which included F-4C and D (P-shred) and F-4E and G (Q-shred) weapon control systems mechanics. Of course, since the F-4C and D are gradually being phased out of the active Air Force, P-shred personnel made up only a small portion of the entire group--less than one-fifth. Thus, over 80 percent of the people in this group maintained the F-4E and G systems.

A. F-4C/D Personnel (GRP061, N=126). All of these personnel maintained the F-4D weapon control system. Further, 23 percent of the group also maintained the F-4C system. Generally, shop personnel were more likely to work on both systems (31 percent maintained both) than flightline personnel (only 14 percent maintained both).

1. F-4C/D Flightline Personnel (GRP187, N=56). As mentioned, flightline personnel primarily maintained the F-4D system, with only a handful also maintaining the F-4C. As other flightline groups in this survey, these personnel mainly performed troubleshooting, remove and replace, and cross-utilization tasks. Some of these tasks were:

- perform F-4C/D radar built-in tests (BIT)
- isolate malfunctions within F-4C/D BIT circuits
- remove or install F-4C/D electrical synchronizers
- remove or install F-4C/D control power supplies
- harmonize F-4C/D indicator control units
- open or close radomes
- remove or install F-4C/D pulse receiver transmitters
- extend or retract F-4 radar packages
- isolate malfunctions within F-4C/D range tracking circuits
- isolate malfunctions within F-4C/D receive circuits
- perform F-4C/D psuedo or rear signal checks using TS-2059 test sets

People in this job type predominantly held the 5-skill level and averaged 4½ years of service.

2. F-4C/D Shop Personnel (GRP163, N=68). These shop mechanics also averaged 4½ years of service with most holding the 5-skill level. As noted, a larger proportion of these personnel maintained the F-4C system, in addition to the F-4D, than in the flightline group. Among tasks typically performed by these personnel were:

- bench check F-4C/D electrical synchronizers or subassemblies
- isolate malfunctions on F-4C/D electrical synchronizers
- bench check F-4C/D pulse receiver-transmitter or subassemblies
- align F-4C/D radar control power supplies
- align F-4C/D pulse receiver-transmitters
- remove or install F-4C/D electrical synchronizer components
- bench check F-4C/D radar control power supplies
- align F-4C/D electrical synchronizers
- align F-4C/D radar antennas
- isolate malfunctions on F-4C/D control power supplies
- bench check F-4C/D radar antennas or subassemblies

B. F-4E/G Personnel (GRP039, N=522). Besides making up over 80 percent of the F-4 functional area, these F-4E and G personnel also comprised over 40 percent of the career field sample. Perhaps because this cluster is so large, it appeared more diversified than others in the sample,

containing seven distinct job types. In keeping with other clusters in the survey sample, flightline mechanics and shop mechanics made up the two largest job groups. In addition to these, there were two groups of mechanics who performed more specialized jobs. Further, two other groups were found which contained a mixture of flightline and shop supervisors. Finally, a seventh group of resident technical school instructors was also found.

The two groups performing more specialized types of maintenance were of special interest. One of these groups was made up entirely of radar calibration shop specialists. Typically, the F-4 radar is scheduled for periodic, preventive maintenance. To conduct that maintenance, the aircraft is towed to the radar calibration shop where these specialists either adjust the radar on the aircraft or remove any defective components for more in-depth repair. Thus, radar calibration mechanics performed a job similar to both flightline maintenance (removing defective units from aircraft) and shop maintenance (repairing the defective units). The second group also contained some radar calibration specialists, but was predominantly made up of flightline personnel. Telephone discussions with these personnel revealed that most had some kind of previous experience in radar calibration shops. For example, some of these mechanics previously had been detailed to radar calibration shops during their current assignment. Others had worked in radar calibration shops during previous assignments. Thus, when an F-4 radar needed adjustment or repair, but was not scheduled for periodic maintenance, these flightline mechanics were called to do the work. In short, these flightline personnel were performing about the same job on an "as needed" basis that radar calibration shop personnel performed on a prescheduled, periodic basis.

With the exception of the groups just discussed, flightline and shop maintenance comprised two distinct, separated jobs. Generally, flightline personnel removed and replaced parts while shop personnel repaired them. Tasks typical of flightline maintenance included:

- isolate malfunctions using F-4E/G WCS built-in tests (BIT)
- remove or install F-4E/G radar line replaceable units
- open or close radomes
- perform F-4E/G radar operational checks using BIT
- extend or retract F-4 radar packages
- perform F-4E/G radar receiver and electrical frequency control checks and alignments
- isolate malfunctions within F-4E/G receiver loops
- perform F-4E/G missile firing function checks using AN/AWM-88 test sets
- isolate malfunctions within F-4E/G pulse transmitter loops
- isolate malfunctions within F-4E/G angle track loops
- isolate malfunctions within F-4E/G antenna positioning loops
- isolate malfunctions using F-4E/G optical sight BIT

Of course, flightline personnel also performed a wide range of cross-utilization tasks.



Shop personnel not only repaired defective units sent in from the flight-line, but also performed preventive maintenance on equipment following a predetermined maintenance schedule. Among tasks they typically performed were:

- isolate and correct malfunctions in F-4E/G waveguide assemblies
- align F-4E/G waveguide assemblies
- bench check F-4E/G waveguide assemblies
- isolate and correct malfunctions in F-4E/G antennas
- bench check F-4E/G radar transmitters
- bench check F-4E/G antennas
- align F-4E/G radar transmitters
- isolate and correct malfunctions in F-4E/G servo assemblies
- isolate and correct malfunctions in F-4E/G radar transmitters
- align F-4E/G antennas
- bench check F-4E/G control oscillators
- isolate and correct malfunctions in F-4E/G electrical synchronizers

All of the airmen in this cluster worked on the F-4E weapon control system. In addition, 36 percent also maintained the F-4G system. This breakdown was the same in each job type, with the exception of technical school personnel who all worked on the F-4G.

1. F-4E/G Flightline Mechanics (GRP319, N=246). These personnel made up the largest job group in this cluster. They performed the full range of flightline maintenance tasks, averaged 3 years and 2 months of military service, and predominantly held the 5-skill level DAFSC.

2. F-4E/G Flightline Radar Mechanics (GRP356, N=18). These were the flightline mechanics with special experience in radar calibration shops discussed above. As mentioned, they performed the same types of maintenance found in a radar calibration shop but did so on an as needed, rather than a prescheduled, basis. In addition, they also performed the typical range of flightline maintenance tasks. Shop-type tasks these personnel performed included:

- align F-4E/G radar transmitters
- isolate and correct malfunctions in F-4E/G waveguide assemblies
- isolate and correct malfunctions in F-4E/G antennas
- align and correct malfunctions in F-4E/G radar transmitters
- perform checks and alignments of F-4E/G radar pulse transmitter functions
- isolate and correct malfunctions in F-4E/G radar set controls

Members of this job group were more junior than those in the previous group, averaging only 2 years and 4 months of service. Nevertheless, most held the 5-skill level DAFSC.

3. F-4E/G Radar Calibration Shop Mechanics (GRP200, N=7). Of the seven members of this group, six were very junior having less than 2 years in the service. Five of these members still held the 3-skill level primary and duty AFSCs. One member of the group was a 7-skill level NCO with nearly 12 years of service.

All of these personnel were assigned to radar calibration shops where they performed just a narrow range of radar maintenance tasks. Not surprisingly, one of their most time-consuming tasks was to perform radar calibrations using the AN/APM-307 test station, a mobile but highly complex, computerized calibration device.

4. F-4E/G Shop Mechanics (GRP067, N=163). Members of this job group worked in a variety of types of shops performing a full range of shop maintenance tasks. They were more senior than other members of the cluster discussed so far, averaging almost 6 years of service, with 20 percent possessing the 7-skill level DAFSC.

5. F-4E/G Flightline and Shop Supervisors (GRP256, N=40). Two-thirds of these NCOs supervised sections in aircraft generation squadrons, while the remaining third supervised shops in component repair squadrons. In addition to their supervising duties, these NCOs also performed the maintenance tasks typical of their organizations.

As would be expected, members of this group were fairly experienced. They averaged nearly 10 years in the service and most of them had attained the 7-skill level primary AFSC.

6. F-4E/G Flightline and Shop Chiefs (GRP245, N=10). NCOs in this job group were even more senior than those in the previous group, averaging 11 years of service. Like the previous group, these NCOs also performed maintenance tasks typical of their units, but they spent considerably less time on those tasks while spending much more time on purely supervisory tasks such as conducting on-the-job training and writing airman performance reports.

7. F-4E/G Technical School Instructors (GRP106, N=13). Twelve of these 13 airmen were instructors in the 3ABR32132Q course at Lowry Technical Training Center. The remaining airman was a weapon control systems maintenance instructor at a field training detachment. These airmen grouped with the F-4E/G cluster instead of the separate technical school instructor cluster because of the F-4 maintenance tasks they performed during the course of instruction. These tasks included:

- perform F-4E/G radar operational checks using built-in tests
- perform F-4E/G radar receiver and electrical frequency control checks and alignments

perform F-4E/G radar transmitter frequency checks and alignments using AN/UPM-145 test sets  
perform F-4E/G missile firing function checks using AN/AWM-88 test sets  
perform F-4E/G angle track checks using AN/UPM-141 test sets

V. SUPPORT PERSONNEL (GRP011, N=17). Members of this job cluster did not maintain aircraft weapon control systems but worked in jobs to support the maintenance missions of their units. Specifically, personnel worked either as Composite Tool Kit (CTK) Monitors or Due In From Maintenance (DIFM) Monitors. (Recently, the term "DIFM monitor" was officially changed to "repair cycle monitor". But, since the term "DIFM monitor" is still commonly used in the field, it will be retained in this report.)

A. Composite Tool Kit Monitors (GRP172, N=7). Most aircraft maintenance units have a work center referred to as a composite tool kit, or CTK. This CTK has an important, wide-ranging function. First, the CTK acts as a central location for all test equipment, tool boxes, vehicles, and technical orders used by all the various Air Force specialties assigned to the unit. Second, the CTK ensures that all the equipment it handles works properly or is sent to the appropriate agency for repair. For example, defective test equipment normally would be sent to a precision measurement equipment laboratory for repair. Third, the CTK issues equipment and technical orders to all users and then monitors the return of those items.

A normal CTK may have as many as 20 people assigned. Since the Air Force has no separate AFSC for CTK specialists, the CTK's manning is provided out of the various specialties assigned to the particular aircraft maintenance unit. Some of these personnel are permanently assigned to the CTK and normally are responsible for managing overall inventory maintenance. Others are only with the CTK for 3-month periods, as they rotate from the flightline or shop into the CTK and then back to their original sections. Jobs of these temporary personnel usually are limited to issuing and monitoring the return of CTK items. It was such temporary personnel who made up the job group reported here.

Members of this group spent most of their time on just eight tasks:

- log turn-in of supplies and equipment
- maintain composite tool kits
- issue supplies and equipment
- make entries on AF Forms 1297 (Temporary Issue Receipt)
- inventory composite tool kits
- complete AF Forms 2005 (Issue/Turn In Request)
- maintain daily status records on support equipment
- research microfiche files for supply requisition data

Averaging 3 years and 8 months of service, all of these airmen held the 5-skill level DAFSC.

B. Due In From Maintenance (DIFM) Monitors (GRP080, N=5). Every aircraft maintenance unit needs a system for placing a priority on each maintenance need or request that comes through it. Many, if not most, of DIFM priority work orders will be for routine, regularly scheduled preventive maintenance (hence the term, "due in from maintenance"). A major part of the DIFM Monitor's job is to track such routine maintenance. But the DIFM Monitor's job is not limited to the paper work needed to track a work order through a component repair shop. Actually, the DIFM Monitor's job is considerably more comprehensive and includes ensuring that the shop has the supplies needed to complete maintenance requests in a timely way. As a result, the DIFM Monitor tracks and maintains the flow of component parts through the shop needed to complete current and anticipated work orders. Examples of tasks performed by the DIFM Monitors in this job group included:

- make entries on DD Forms 1348-1 (DOD Single Line Item Release/ Receipt Document)
- complete materiel deficiency reports
- make entries on AFTO Forms 349 (Maintenance Data Collection Record)
- maintain due-in-from-maintenance lists (R26/869-87 or T-21)
- make entries on AF Forms 2520 (Repair Cycle Control Log)
- review supply dialy document registers (DO4/804-11)

Three of the 5 members of this job group were experienced NCOs having from 10 to 21 years of military service. Of the remaining 2, 1 was a 3-skill level airman who had 16 months of service time, and the other was a 5-skill level airman who had 4 years of time in the career field but 7 years in the service. Interestingly, the 3-skill level individual was placed in the DIFM monitor job temporarily because a manning problem encountered in the shop required all experienced airmen to work in direct maintenance jobs. Subsequently, when the manning problem improved, the airman was replaced by a 7-skill level technical sergeant.

VI. TECHNICAL TRAINING PERSONNEL (GRP024, N=18). Several basic, Weapon Control Systems AFSC-awarding resident courses currently are taught at the Lowry Technical Training Center. Of course, these courses correspond to the four 3-skill level specialties: 32132 (slick) 32132A, 32132P, and 32132Q. Due to the gradual phaseout of the F-106 and F-4C/D from the active Air Force, the 32132A and P courses have a very low flow of active Air Force students. As a result, the 32132 slick and Q courses are the two major active Air Force courses taught at the Center. Instructors for all courses were included in this survey. As noted, 32132Q course instructors formed a job type within the F-4E and G job cluster. Instructors in the 32132A course grouped with the F-106 cluster but, due to the pattern of tasks they performed, did not form a distinct job group. By contrast, instructors in the

32132 slick and P courses did not group with their respective functional groups. Instead, these instructors formed the present, separate cluster with the two courses represented by two distinct job types. Further, the "slick" instructors were joined in their job type by the operational mechanics who maintained the system used in the course.

A. A-7 Instructors and Mechanics (GRP119, N=8). Of the eight people in this job group, four were instructors in the 3ABR32132-002 Course and the remaining four were mechanics who maintained the aircraft system trainer used in the course. Although this course was designed to train airmen on the F-5 and A-10 weapon control system, the A-7 system was the only system physically used in the course because the A-7 system was believed to be a good generic example of the F-5 and A-10 systems. Further, the A-7 system trainer was more economical to procure and maintain than those of the F-5 and A-10.

All eight personnel in this group performed the same maintenance tasks. Of course, Instructors performed these tasks during the course of instruction. Among these tasks were:

- perform A-7D/K navigational weapon delivery computers  
(NWDC) self-test sequences
- perform A-7D/K radar fault locator checks
- perform ASM-184/AWM-69 checks of A-7D/K weapons delivery  
systems
- perform operational checks of A-7D/K heads-up display  
systems
- remove or install A-7D/K forward looking radar (FLR)  
sweep generators
- remove or install A-7D/K FLR transmitters
- remove or install A-7D/K NWDC
- remove or install A-7D/K pilot display units
- remove or install A-7D/K signal data processors

The four mechanics in this group were rather junior personnel, all having 2 years or less military experience. Of the 4 instructors, 2 had over 10 years of service while the other 2 were still in their first enlistment.

B. F-4C/D Instructors (GRP097, N=6). Five of these instructors taught in the P-shred awarding course. In contrast to the "slick" course, the F-4C and D system taught in this course was physically represented by an F-4C and D system trainer. Besides training tasks, these instructors performed a variety of F-4 maintenance tasks including:

- perform F-4C/D pseudo or rear signal checks using  
TS-2059 test sets
- perform F-4C/D radar built-in tests (BIT)
- perform F-4C/D lead computing optical sight system BIT

perform F-4C/D AIM 7 missile firing circuits using  
AN/AWM-87 (DF) test sets  
perform functional checks of F-4C/D radar subsystems  
using AN/UPM 145 test sets

The sixth member of this job group was an F-4C/D Instructor at a field training detachment who performed tasks similar to those above. This person was the most senior member of the job group, having over 14 years of experience in the Air Force. In comparison, the remaining five instructors were relatively junior, all having served in the Air Force 5 years or less.

VII. MANAGEMENT AND DEBRIEFING PERSONNEL (GRP014, N=155).  
Every maintenance career field normally includes a cadre of personnel who do not perform many maintenance tasks themselves, but supervise others or in some way contribute to the management of career field activities. In the Weapon Control Systems Maintenance career field, that cadre of people was represented by this job cluster.

A wide variety of jobs were performed by individuals in this cluster. Many of these individual jobs were similar enough to form 10 clearly defined, distinct job types. But, about half of the people in this cluster performed jobs that did not group into such well-defined job types. Nevertheless, the jobs these people performed were variations of the 10 basic jobs found.

The jobs of this cluster fell into three broad categories: supervisory, staff-level NCO, and technical-level management. Six of the 10 job types belonged to the supervisory category. Personnel in these job types performed supervisory tasks in a variety of settings, such as in aircraft generation squadrons, component repair shops, and composite tool kit sections. Tasks typical of these supervisors included:

- determine work priorities
- coordinate work activities with other sections or agencies
- conduct inspections
- write airman performance reports
- counsel subordinates on personal or military-related matters
- inspect personnel for compliance with military standards
- orient newly assigned personnel
- counsel subordinates on job progression or career development

Only one job type fell into the staff-level NCO category. That job type consisted of personnel who supervised no one, but performed important jobs in various organizations. For example, one person was a full-time self-inspection monitor, another was a career development course writer, and

another was a quality assurance inspector. Although these job titles appear highly diverse, these personnel performed several tasks in common. These tasks included:

- write correspondence
- evaluate inspection reports or procedures
- compile information for reports or staff studies
- participate in meetings, such as staff meetings,  
briefings, conferences, or workshops
- conduct inspections

Finally, three job types belonged to the technical-level management category. These three job types were quality assurance inspectors, debriefing section supervisors, and aircrew debriefers. Quality assurance inspectors contribute to maintenance management by ensuring that completed maintenance actions meet necessary standards. Aircrew debriefers and their supervisors contribute to maintenance management by evaluating pilot-feedback on weapon control system operation to determine whether a need for maintenance exists. If the debriefers conclude a maintenance need does exist, a work order is assigned to the need, and the need is entered into the job control system.

A. A-10 Shift and Small Shop Supervisors (GRP184, N=12). Most of these airmen supervised less than five subordinates. All of them held positions either as shift or shop supervisors in A-10 component repair squadrons. Averaging almost 14 years of service, each of these personnel held the 7-skill level primary AFSC.

B. Branch and Large Shop Supervisors (GRP150, N=17). These airmen differed from the previous group in several ways. First, most of them supervised more than 20 people and held positions either as maintenance branch or shop NCOICs. Second, members of this group came from a variety of settings. Some worked in F-4E and G units, others in F-106 units, and still others in A-10 and F-5 units. Third, these personnel were even more senior than the previous group. They averaged nearly 16 years of service, and 30 percent of them had attained the 9-skill level primary AFSC.

C. Flightline Maintenance Managers (GRP181, N=8). While the two previous groups mainly supervised shop maintenance activities, members of this group supervised F-4D or F-4E flightline maintenance activities. Averaging about 17 years of military service, these airmen supervised up to 70 subordinates. About half of these personnel held the 9-skill level primary AFSC.

D. Flightline Chiefs (GRP193, N=5). These airmen were similar to the previous group, except some of them supervised A-10 maintenance activities. In addition, these personnel generally supervised fewer people and performed a larger number of administrative tasks than the previous group.

E. Support Section Supervisors (GRP132, N=7). Members of this group supervised composite tool kit personnel or personnel working in unit supply types of jobs. They averaged 13 years of service. Six of the seven held the 7-skill level primary AFSC, while the seventh held the 5-skill level.

F. Staff-Level Supervisors (GRP103, N=6). Personnel in this group were among the most senior in the career field. They ranged from 19 to 22 years of experience. Further, half of these personnel held the 9-skill level primary AFSC.

In keeping with their years of experience, members of this group worked in higher level management jobs. For example, one member was the assistant NCOIC of a tactical fighter wing maintenance operation center, while another was the chief of a technical training branch.

G. Staff NCOs (GRP100, N=5). This group, already described in the introduction to this cluster, was also made up of senior personnel who ranged in experience from 13 to 20 years of military service. Of the five people in this group, two held the 9-skill level primary AFSC, while the rest possessed the 7-skill level.

H. Quality Assurance Personnel (GRP146, N=10). These 7-skill level NCOs averaged about 14 years of military service. In addition to ensuring that completed equipment maintenance met standards, they also performed safety inspections and investigated accidents.

I. F-106 Aircrew Debriefers (GRP082, N=5). All five of these personnel were Aircrew Debriefers. Their job was to talk with pilots at the end of each mission to determine if any weapon control system malfunctions had appeared during flight. If such malfunctions had occurred, the problem was assigned a work order number and entered into the job control system.

While all aircraft systems have end-of-mission debriefings, only F-106 Debriefers appeared in this or the next job group. (Debriefers for other aircraft systems did not appear as distinguishably different from other personnel in this study.)

Members of this job group were 5-skill level personnel serving in their first or second enlistment.

J. F-106 Debriefing Section Supervisors (GRP136, N=6). These airmen supervised F-106 Aircrew Debriefers in addition to debriefing aircrew themselves. Five of the six people in this group were 7-skill level personnel ranging in experience from 6 to 20 years of service. The sixth member was a 5-skill level airman with 3 years and 4 months of service.

### Comparison of Specialty Jobs

While the previous section described each job group separately, this section compares the groups to highlight important features about the job groups viewed all together. One of the clearest findings to appear in the



survey was the close correspondence between job groups and duty AFSC; particularly, personnel who maintained a specific aircraft system were all in the same career ladder. Although this observation should be true almost by definition, the correspondence between career ladder and job group does show that the shred-based classification structure is working the way it was intended to.

To further highlight differences and similarities between job groups, Table 11 displays a variety of characteristics of personnel in each job cluster. Some similarities among groups are evident in the table. For example, most personnel in each group worked under the combat-oriented maintenance organization (COMO) concept. COMO is a way of organizing and managing aircraft maintenance units beyond that specified in AFR 66-1. Under COMO, personnel assigned to flightline maintenance--normally in an aircraft generation squadron--not only perform their primary maintenance duties, but also perform a variety of cross-utilization tasks. Another similarity was that the majority of personnel in each group were assigned to the CONUS. Note, however, that personnel in F-5, A-10, and F-4E and G jobs were more likely to be assigned overseas than personnel in AC-130H, F-106, and F-4C and D jobs.

Among differences evident in the table, one of the most notable was the difference in experience levels across groups. Management and briefing personnel, for example, were the most experienced group, while F-5 personnel were the least experienced. Another striking difference was the number of tasks performed by the various groups. For instance, AC-130H personnel performed the largest number of tasks--probably because they performed both flightline and shop types of maintenance--while support personnel performed the fewest number of tasks.

Job attitudes were also measured. Data were collected in five areas: how interesting people find their jobs, how well they felt their talents were used, how well they felt their training was used, how satisfied they were with the sense of accomplishment their jobs gave them, and whether they intended to reenlist when the time came. In Table 12, support personnel clearly were the least satisfied members of the sample on all measures except the reenlistment question. By contrast, AC-130H personnel appeared to be the most satisfied group, closely followed by F-106 personnel. In addition, note that A-10 personnel appeared less satisfied with their jobs than other personnel. This relative dissatisfaction also appeared in write-in comments from these personnel.

One surprise is evident in Table 12. In many Air Force specialties, technical training personnel are among the most satisfied in the career field. but in this survey, technical training personnel appeared to be among the less satisfied. This relative dissatisfaction was most clearly expressed on the sense of accomplishment and intention to reenlist measures. No clear reason for this dissatisfaction was apparent among the survey data.

TABLE 11

## BACKGROUND CHARACTERISTICS OF PERSONNEL IN JOB CLUSTERS\*

NUMBER IN GROUP PERCENT OF SAMPLE	F-5E/F PERSONNEL (GRP088)		A-10 PERSONNEL (GRP079)		FIRE CONTROL MAINTENANCE AC-130H PERSONNEL (GRP149)		F-106 PERSONNEL (GRP032)		F-4C/D PERSONNEL (GRP061)	
	20	2%	86	7%	15	1%	230	19%	126	10%
<b>SKILL LEVEL</b>										
3-SKILL	15%		22%		20%		14%		9%	
5-SKILL	80%		66%		47%		57%		73%	
7-SKILL	5%		12%		33%		28%		18%	
<b>SHRED</b>										
"SLICK"	100%		100%		100%		0		0	
A	0		0		0		78%		0	
C	0		0		0		19%		0	
P	0		0		0		0		100%	
Q	0		0		0		1%		0	
<b>AVERAGE GRADE</b>										
AVERAGE TAFMS (MONTHS)	E-3		E-3		E-4		E-4		E-4	
PERCENT CONUS	36		43		65		75		54	
PERCENT OVERSEAS	80%		72%		100%		99%		94%	
	20%		28%		0		1%		6%	
<b>COMO ORGANIZATION</b>										
AGS	25%		54%		0		28%		30%	
CRS	50%		30%		67%		19%		41%	
EMS	0		0		0		0		0	
FIS	0		0		0		37%		0	
PERCENT NOT UNDER COMO	20%		13%		0		14%		20%	
<b>PERCENT SUPERVISING</b>										
AVERAGE NUMBER OF TASKS PERFORMED	20%		17%		40%		42%		21%	
	86		57		185		142		120	

\* Percentages do not always add up to 100 due to rounding or to personnel who left items blank

TABLE 11 (CONTINUED)

## BACKGROUND CHARACTERISTICS OF PERSONNEL IN JOB CLUSTERS\*

	F-4E/G PERSONNEL (GRP039)	SUPPORT PERSONNEL (GRP011)	TECHNICAL TRAINING PERSONNEL (GRP024)	MANAGEMENT AND DEBRIEFING PERSONNEL (GRP014)
NUMBER IN GROUP	522	17	18	155
PERCENT OF SAMPLE	43%	1%	1%	13%
<u>SKILL LEVEL</u>				
3-SKILL	17%	6%	11%	1%
5-SKILL	64%	71%	67%	28%
7-SKILL	18%	24%	22%	68%
<u>SHRED</u>				
"SLICK"	0	0	50%	23%
A	0	41%	6%	25%
C	0	6%	6%	10%
P	0	6%	22%	8%
Q	100%	47%	17%	34%
<u>AVERAGE GRADE</u>				
AVERAGE TAFMS (MONTHS)	E-4	E-4	E-4	E-6
PERCENT CONUS	54	71	67	153
PERCENT OVERSEAS	71%	82%	94%	79%
	29%	18%	6%	21%
<u>COMO ORGANIZATION</u>				
AGS	44%	71%	0	28%
CRS	38%	12%	0	23%
EMS	0	0	0	0
FIS	0	0	0	10%
PERCENT NOT UNDER COMO	13%	18%	72%	16%
<u>PERCENT SUPERVISING</u>				
AVERAGE NUMBER OF TASKS PERFORMED	31%	18%	22%	63%
	107	20	49	63

\* Percentages do not always add up to 100 due to rounding or to personnel who left items blank

TABLE 12

## JOB SATISFACTION OF PERSONNEL IN JOB CLUSTERS\*

	F-5E/F PERSONNEL (GRP088)	A-10 PERSONNEL (GRP079)	FIRE CONTROL MAINTENANCE AC-130H PERSONNEL (GRP149)	F-106 PERSONNEL (GRP032)	F-4C/D PERSONNEL (GRP061)
<u>FINDS JOB:</u>					
DULL	5%	20%	0%	6%	6%
SO-SO	35%	21%	20%	16%	15%
INTERESTING	60%	59%	80%	77%	78%
<u>FEELS TALENTS USED:</u>					
LITTLE OR NOT AT ALL	25%	44%	7%	14%	16%
FAIRLY WELL OR BETTER	75%	56%	93%	86%	83%
<u>FEELS TRAINING USED:</u>					
LITTLE OR NOT AT ALL	35%	45%	13%	7%	11%
FAIRLY WELL OR BETTER	65%	55%	87%	93%	88%
<u>SATISFIED WITH SENSE OF ACCOMPLISHMENT:</u>					
NO	5%	25%	13%	14%	19%
AMBIVALENT	15%	13%	0%	10%	10%
YES	80%	62%	87%	76%	70%
<u>PLAN TO REENLIST:</u>					
WILL RETIRE	0%	0%	7%	3%	2%
NO	70%	29%	27%	30%	29%
YES	30%	70%	67%	67%	66%

\* Percentages do not always add up to 100 due to rounding or to personnel who left items blank

TABLE 12 (CONTINUED)

## JOB SATISFACTION OF PERSONNEL IN JOB CLUSTERS\*

	F-4E/G PERSONNEL (GRP039)	SUPPORT PERSONNEL (GRP011)	TECHNICAL TRAINING PERSONNEL (GRP024)	MANAGEMENT AND DEBRIEFING PERSONNEL (GRP014)
<u>FINDS JOB:</u>				
DULL	5%	41%	22%	16%
SO-SO	17%	29%	22%	14%
INTERESTING	77%	29%	56%	70%
<u>FEELS TALENTS USED:</u>				
LITTLE OR NOT AT ALL	19%	77%	39%	27%
FAIRLY WELL OR BETTER	81%	14%	61%	72%
<u>FEELS TRAINING USED:</u>				
LITTLE OR NOT AT ALL	13%	82%	33%	39%
FAIRLY WELL OR BETTER	86%	18%	67%	61%
<u>SATISFIED WITH SENSE OF ACCOMPLISHMENT:</u>				
NO	16%	53%	22%	21%
AMBIVALENT	11%	18%	28%	12%
YES	73%	30%	50%	66%
<u>PLAN TO REENLIST:</u>				
WILL RETIRE	1%	12%	0%	23%
NO	34%	41%	39%	15%
YES	64%	47%	61%	59%

\* Percentages do not always add up to 100 due to rounding or to personnel who left items blank

In summary, the picture presented is of a diverse career field where the diversity closely corresponds to the shredded classification structure. The majority of personnel are under COMO, with the result that those in flightline maintenance jobs perform a number of cross-utilization tasks. In terms of job satisfaction, the obtained pattern was fairly typical of maintenance career fields, with the exception of technical training personnel, who appeared less well satisfied than is often found in other specialties.

## ANALYSIS OF DAFSC GROUPS AND EVALUATION OF AFR 39-1 SPECIALTY DESCRIPTIONS

### Introduction

One of the major uses of occupational survey data is the evaluation of AFR 39-1 Specialty Descriptions. Data can be used to evaluate both the external form of the specialty established under AFR 39-1 and the internal content of the individual skill level job descriptions. In AFSC 321X2/A/C/P/Q, the external form is the shredded structure. Since the preceding SPECIALTY JOBS section has already shown that career field jobs fully support the shredded specialty structure, this section will examine the internal content of the skill level descriptions. To permit this examination, a detailed analysis was undertaken of skill-level jobs. The first step in this analysis was to determine how 3-, 5-, and 7-skill level personnel were distributed across specialty jobs. That distribution then served as a background for examining those tasks characteristic of personnel at the 3-, 5-, and 7-skill level duty AFSCs (DAFSCs). Next, those tasks that distinguished personnel at one skill level from another were then identified. Finally, the results of this skill-level analysis were compared to the AFR 39-1 descriptions to determine whether the descriptions adequately described: (a) the characteristic jobs at each skill level and (b) the differences between skill levels.

As noted in the above paragraph, the specialty shreds were not an issue in this analysis since the previous section had already shown they were justified. For that reason, and because AFR 39-1 presents common skill level descriptions for all shreds, the focus of this section is on skill level data for all shreds combined, although differences between shreds will be noted when they appear.

### Distribution of Skill Level Personnel Across Specialty Jobs

Table 13 shows how 3-, 5-, and 7-skill level personnel were distributed across the major job groups identified in the previous section. Note that the table reports the raw numbers of skill level personnel in each group without regard to shred. Also shown is the total number of all personnel at a given skill level without regard to job group. Perhaps the most striking feature of the table is the relatively small number of 7-skill level personnel working in management-oriented job groups. Only 105 of the 321 7-skill level members were working in the management cluster. If support and technical training personnel are excluded, the remaining 7-skill level members in technical jobs add up to 198, over 62 percent of the entire 7-skill level group. This finding would suggest that maintenance tasks comprise a large part of 7-skill level job descriptions. Using the Q-shred as an example, this suggestion is confirmed by the 32172Q job description (N=103 members). Examples of maintenance tasks these 7-skill level personnel performed included (percent performing is shown in parentheses):

TABLE 13

## DISTRIBUTION OF SKILL LEVEL PERSONNEL ACROSS SPECIALTY JOBS

JOB GROUP	NUMBER OF PERSONNEL		
	3-SKILL LEVEL	5-SKILL LEVEL	7-SKILL LEVEL
F-5E/F PERSONNEL (GRP088)	3	16	1
A-10 PERSONNEL (GRP079)	19	57	10
AC-103H FIRE CONTROL MAINTENANCE PERSONNEL (GRP149)	3	7	5
F-106 PERSONNEL (GRP032)	32	130	65
F-4C/D PERSONNEL (GRP061)	11	92	22
F-4E/G PERSONNEL (GRP039)	90	336	95
SUPPORT PERSONNEL (GRP011)	1	12	4
TECHNICAL TRAINING PERSONNEL (GRP024)	2	12	14
MAINTENANCE AND DEBRIEFING PERSONNEL (GRP014)	<u>2</u>	<u>43</u>	<u>105</u>
TOTAL	163	705	321



- bleed or pressurize weapon control systems (63%)
- extend or retract F-4 radar packages (65%)
- open or close radomes (67%)
- perform soldering techniques (76%)
- remove or install desiccators (58%)
- remove or install relay panels (53%)
- remove or install WCS fuses, light bulbs, or tubes (81%)
- repair aircraft wiring (56%)
- safety wire weapon control system components or fasteners (69%)
- boresight F-4E/G optical sight systems (57%)
- harmonize F-4E/G radar subsystems (55%)
- isolate F-4E/G WCS pressurization malfunctions (65%)
- isolate malfunctions using F-4E/G WCS built-in tests (65%)
- isolate malfunctions within F-4E/G AIM-7 missile firing circuits (65%)
- isolate malfunctions within F-4E/G angle track loops (67%)
- isolate malfunctions within F-4E/G antenna positioning loops (67%)
- isolate malfunctions within F-4E/G continuous wave circuits (67%)
- isolate malfunctions within F-4E/G indicator groups (68%)
- remove or install F-4E/G optical sight components (62%)
- remove or install F-4E/G radar line replaceable units (64%)
- service F-4E/G nose wheel well desiccant dehydrators (59%)

Although the above list of tasks does not exhaust the variety of maintenance tasks performed by 7-skill level personnel, it does highlight the kinds of maintenance tasks performed by these senior personnel. Apparently, 7-skill level members perform some of the more complex maintenance tasks (such as troubleshooting), perhaps indicating that the career field lacks an adequately sized pool of experienced mechanics to meet the maintenance workload. Such a lack of experience was noted in Table 2 in the Specialty Background section.

#### Job Descriptions of 3-, 5-, and 7-Skill Level Personnel

As evident in Table 13, most 3- and 5-skill level airmen worked in maintenance-oriented job groups. Tables 14 and 15 show those tasks that were highest in percent time spent ratings for 3- and 5-skill level airmen combined and 7-skill level airmen, respectively. The job descriptions of 3- and 5-skill level airmen were virtually identical; thus, separate tables for those two skill level groups was unnecessary. Note that all of the tasks in Table 14 are maintenance-oriented, thus indicating that 3- and 5-skill level

airmen spend most of their time actually maintaining aircraft weapon control systems. In contrast, Table 15 indicates that 7-skill level airmen perform numerous supervisory and management-oriented tasks in addition to the maintenance tasks discussed above.

TABLE 14

TASKS TYPICALLY PERFORMED BY 3- AND 5-SKILL LEVEL PERSONNEL  
(ALL SHREDS COMBINED)  
(DESCENDING ORDER OF TIME SPENT ON EACH TASK\*)

<u>TASKS</u>	<u>PERCENT PERFORMING</u>
E223 MAKE ENTRIES ON AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	64
E224 MAKE ENTRIES ON AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	63
I352 OPEN OR CLOSE RADOMES	56
I374 RESEARCH TECHNICAL ORDERS TO IDENTIFY COMPONENTS OR ITEMS OF EQUIPMENT	66
I365 REMOVE OR INSTALL WCS FUSES, LIGHT BULBS, OR TUBES	78
I359 PERFORM SOLDERING TECHNIQUES APPLICABLE TO WCS	78
G296 OPERATE AEROSPACE GROUND EQUIPMENT, SUCH AS POWER UNITS, HEATERS, OR LIGHT CARTS	57
I356 PERFORM FOREIGN OBJECT INSPECTIONS	62
I353 PACK OR UNPACK WCS COMPONENTS	63
I375 SAFETY WIRE WCS COMPONENTS OR FASTENERS	68
I367 REMOVE OR INSTALL WCS PANELS OR DOORS	58
I369 REMOVE OR INSTALL WCS WIRING TERMINALS OR CONNECTOR PLUGS	65
I370 REPAIR AIRCRAFT WIRING	60
I343 BLEED OR PRESSURIZE WEAPON CONTROL SYSTEMS	59
I362 REMOVE OR INSTALL DESICCATORS	58
G306 REMOVE OR INSTALL AIRCRAFT PANELS	51
I368 REMOVE OR INSTALL WCS SOLDERLESS CONNECTORS OR TERMINALS	56
I376 SERVICE DESICCANTORS	55

\* Data not shown

TABLE 15

TASKS TYPICALLY PERFORMED BY 7-SKILL LEVEL PERSONNEL  
(ALL SHREDS COMBINED)  
(DESCENDING ORDER OF TIME SPENT ON EACH TASK\*)

TASKS	PERCENT PERFORMING
C131 WRITE AIRMAN PERFORMANCE REPORTS	72
E226 MAKE ENTRIES ON AFTO FORMS 781A (MAINTENANCE DISCREPANCY AND WORK DOCUMENT)	56
E223 MAKE ENTRIES ON AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	61
A23 PARTICIPATE IN MEETINGS SUCH AS STAFF MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS	53
C120 INSPECT PERSONNEL FOR COMPLIANCE WITH MILITARY STANDARDS	63
A8 DETERMINE WORK PRIORITIES	61
E214 MAKE ENTRIES ON AF FORMS 623 AND 623A (ON-THE-JOB TRAINING RECORD)	70
B49 COUNSEL SUBORDINATES ON PERSONAL OR MILITARY-RELATED MATTERS	64
D166 MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	51
I356 PERFORM FOREIGN OBJECT INSPECTIONS	54
E224 MAKE ENTRIES ON AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	60
B48 COUNSEL SUBORDINATES ON JOB PROGRESSION OR CAREER DEVELOPMENT	60
B71 ORIENT NEWLY ASSIGNED PERSONNEL	57
I374 RESEARCH TECHNICAL ORDERS TO IDENTIFY COMPONENTS OR ITEMS OF EQUIPMENT	51
I359 PERFORM SOLDERING TECHNIQUES APPLICABLE TO WCS	52
I365 REMOVE OR INSTALL WCS FUSES, LIGHT BULBS, OR TUBES	51

\* Data not shown

### Tasks Distinguishing 5-Skill Level From 7-Skill Level Airmen

Tables 16 through 20 display tasks that distinguished 5-skill level from 7-skill level airmen in each shred. Two features of the data in these tables are particularly noteworthy. First, many of the maintenance tasks that were most distinctive for 5-skill level personnel were also performed by 30 to 50 percent of 7-skill level personnel. Thus, while maintenance tasks are most characteristic of 5-skill level jobs, they also appear in 7-skill level job descriptions as discussed above. Second, supervisory tasks were far more typical of 7-skill level than of 5-skill level jobs. Clearly, these tables, which are broken out by individual career ladder, reflect the same pattern of progression found above in data for all Weapon Control Systems career ladders combined. At the 5-skill level, airmen mainly perform system maintenance tasks. When they advance to the 7-skill level, they continue to perform a variety of maintenance tasks in addition to their newly acquired supervisory duties.

### Comparison of DAFSC Job Data to AFR 39-1 Specialty Descriptions

Using the results of the preceding DAFSC analysis as a basis, AFR 39-1 specialty descriptions were evaluated for their coverage of skill-level jobs, as well as the adequacy of distinctions made between skill levels. As noted, the DAFSC analysis found no important differences between 3- and 5-skill level jobs. Appropriately, then, AFR 39-1 covers both 3- and 5-skill level jobs in a single description. The content of that description was found to cover most types of tasks performed by 3- and 5-skill level airmen; however, cross-utilization tasks were not covered. Although cross-utilization tasks do not make up a large part of the 3- or 5-skill level job, they are often performed by junior airmen assigned to aircraft generation squadrons, as reported in the SPECIALTY JOBS section. Turning to the AFR 39-1 7-skill level job description, here no problems were found at all. Consistent with the DAFSC analysis, the AFR 39-1 description correctly emphasized both maintenance and supervisory tasks performed by 7-skill level members. Further, AFR 39-1 properly distinguished 7-skill level from 5-skill level jobs by identifying the more complex nature of maintenance performed by 7-skill level airmen.

TABLE 16

TASKS WHICH BEST DISTINGUISH THE 32152 AND 32172 PERSONNEL

TASKS	32152 (N=104)	32172 (N=43)	DIFFERENCE
I344 CLEAN MAINTENANCE SHOP AREAS SUCH AS FLOORS OR WALLS	79	42	+37
I362 REMOVE OR INSTALL DESICCATORS	56	23	+33
G318 WALK WINGS OR TAILS DURING AIRCRAFT TOWING OPERATIONS	47	23	+24
I370 REPAIR AIRCRAFT WIRING	57	35	+22
G304 POSITION OR REVIEW AIRCRAFT CHOCKS	42	21	+21
I359 PERFORM SOLDERING TECHNIQUES APPLICABLE TO WCS	65	44	+21
I376 SERVICE DESICCATORS	43	23	+20
L504 REMOVE OR INSTALL A-10 PROJECTION UNITS	52	35	+17
L506 REMOVE OR INSTALL A-10 STANDBY RETICLE LAMPS	47	30	+17
I365 REMOVE OR INSTALL WCS FUSES, LIGHT BULBS, OR TUBES	63	47	+16
L500 RAISE OR LOWER A-10 WIND SCREENS	46	30	+16
I360 PERFORM TIME COMPLIANCE TECHNICAL ORDERS (TCTO)	37	21	+16
L498 PERFORM OPERATIONAL BIT CHECKS OF A-10 HUD SYSTEMS	55	40	+15
L499 PERFORM OPERATIONAL BIT CHECKS ON A-10 TV MONITORS	55	40	+15
C118 INDORSE AIRMAN PERFORMANCE REPORTS	6	40	-34
D160 EVALUATE OJT TRAINEES OR TRAINERS	5	40	-35
B87 WRITE CORRESPONDENCE	2	37	-35
C128 REVIEW MAINTENANCE DATA COLLECTION FORMS	13	49	-36
A4 COORDINATE WORK ACTIVITIES WITH OTHER SECTIONS OR AGENCIES	7	44	-37
A43 SCHEDULE WORK ASSIGNMENTS AND PRIORITIES	4	42	-38
B71 ORIENT NEWLY ASSIGNED PERSONNEL	16	56	-40
A8 DETERMINE WORK PRIORITIES	16	56	-40
B77 SUPERVISE WEAPON CONTROL SYSTEMS MECHANICS (AFSC 32152)	9	56	-47
B48 COUNSEL SUBORDINATES ON JOB PROGRESSION OR CAREER DEVELOPMENT	13	60	-47
A23 PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS	13	63	-50
C131 WRITE AIRMAN PERFORMANCE REPORTS	15	65	-50
B49 COUNSEL SUBORDINATES ON PERSONAL OR MILITARY-RELATED MATTERS	13	65	-52
C120 INSPECT PERSONNEL FOR COMPLIANCE WITH MILITARY STANDARDS	13	70	-57

TABLE 17

TASKS WHICH BEST DISTINGUISH DAFSC 32152A AND 32172A PERSONNEL  
(PERCENT MEMBERS PERFORMING)

TASKS	DAFSC 32152A (N=130)	DAFSC 32172A (N=71)	DIFFERENCE
I344 CLEAN MAINTENANCE SHOP AREAS, SUCH AS FLOORS AND WALLS	73	45	+28
S816 BORESIGHT F-106 RADAR SUBSYSTEMS ANTENNAS (LRU-017)	65	41	+24
R796 REMOVE OR INSTALL F-106 FLIGHT CONTROL AND MEASUREMENT AUTOMATIC FLIGHT CONTROL SYSTEM COMPONENTS	74	50	+24
I365 REMOVE OR INSTALL WCS FUSES, LIGHT BULBS, OR TUBES	60	39	+21
R798 REMOVE OR INSTALL F-106 IR SUBSYSTEM DRIVE LRU	79	59	+20
R799 REMOVE OR INSTALL F-106 IR SUBSYSTEM IR/RADAR SWITCHING LRU	79	59	+20
R808 REMOVE OR INSTALL F-106 SUBSYSTEM RAPID TUNE/PARAMP OR AUTOMATIC FREQUENCY CONTROL LRU	77	58	+18
R788 ALIGN F-106 RADAR SUBSYSTEM RANGE TRACKS (LRU-095, 103)	79	61	+18
R794 PERFORM F-106 OPERATIONAL CHECKS, SUCH AS SHORT SYSTEM GROUND CHECKS (SSGC) AND COMPUTER ROUTINES	79	61	+18
R780 ALIGN F-106 IR SUBSYSTEM IR/RADAR SWITCHING (LRU-663)	77	59	+18
R789 ALIGN F-106 RADAR SUBSYSTEM RAPID TUNE/PARAMP OR AUTOMATIC FREQUENCY CONTROL (LRU-541, 841, 866)	77	59	+18
I375 SAFETY WIRE WCS COMPONENTS OR FASTENERS	64	46	+18
R781 ALIGN F-106 RADAR SUBSYSTEM ANTENNA SEARCH DRIVE (LRU-241)	79	62	+17
R782 ALIGN F-106 RADAR SUBSYSTEM ANTENNA TRACK DRIVES (LRU-041, 141, 106, 206)	79	62	+17
D118 INDORSE AIRMAN PERFORMANCE REPORTS	8	42	-34
A1 DEVELOP WORK METHODS OR PROCEDURES	4	39	-35
A41 SCHEDULE LEAVES, PASSES, OR TDY	13	49	-36
B49 COUNSEL SUBORDINATES ON PERSONAL OR MILITARY-RELATED MATTERS	25	62	-37
A23 PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS	18	56	-38
E215 MAKE ENTRIES ON AFTO FORMS 797 (JOB QUALIFICATION STANDARD CONTINUATION)	7	47	-40
A4 COORDINATE WORK ACTIVITIES WITH OTHER SECTIONS OR AGENCIES	14	56	-42

TABLE 18

TASKS WHICH BEST DISTINGUISH DAFSC 32152C AND 32172C PERSONNEL  
(PERCENT MEMBERS PERFORMING)

TASKS	DAFSC 32152C (N=23)	DAFSC 32172C (N=71)	DIFFERENCE
U490 CLEAN OR SERVICE CATEGORY II EQUIPMENT FILTERS	61	13	+48
U947 INSPECT CATEGORY II SUPPORT EQUIPMENT	57	11	+46
U933 CALIBRATE F-106 486102 FLIGHT CONTROL AND MEASUREMENT TEST STANDS	82	36	+46
U976 REMOVE OR INSTALL 486102 FLIGHT CONTROL AND MEASUREMENT TEST STAND COMPONENTS	87	42	+45
U938 CALIBRATE F-106 486977 COMPUTER TEST CONSOLES	78	34	+44
R783 ALIGN F-106 RADAR SUBSYSTEM ANTENNAS (LRU-107)	83	39	+44
R784 ALIGN F-106 RADAR SYSTEM ANTI-CHAFF (LRU-506)	83	39	+44
R785 ALIGN F-106 RADAR SUBSYSTEM ATTACK DISPLAYS (LRU-223, 385, 523)	83	39	+44
R786 ALIGN F-106 RADAR SUBSYSTEM AUTOMATIC GAIN CONTROL (AGC) ANGLE TRACK AND HOM (LRU-020, 095)	83	39	+44
R790 ALIGN F-106 RADAR SUBSYSTEM RECEPTION AND DISPLAYS (LRU-065, 080, 195, 295)	83	39	+44
R791 ALIGN F-106 RADAR SUBSYSTEM SEARCH, SUPERSEARCH, AND HAND CONTROLS (LRU-083, 241, 663)	83	39	+44
R793 ALIGN F-106 RADAR SUBSYSTEM TIMING AND TRANSMISSIONS (LRU-003, 065)	83	39	+44
I378 TEST WLS SOLID-STATE DEVICES	87	45	+42
R787 ALIGN F-106 RADAR SUBSYSTEM HEADS-UP DISPLAYS (HUD) (LRU-450)	78	37	+41
A7 DETERMINE REQUIREMENTS FOR SPACE, EQUIPMENT, OR SUPPLIES	13	39	-26
C88 ANALYZE WORKLOAD REQUIREMENTS	4	32	-29
A6 DETERMINE REQUIREMENTS FOR MAINTENANCE OF EQUIPMENT (HUD)	17	45	-29
C100 EVALUATE INDIVIDUALS FOR PROMOTIONS, DEMOTIONS, OR RECLASSIFICATION	9	37	-28
B66 IMPLEMENT SECURITY PROGRAMS	0	29	-29
C133 WRITE RECOMMENDATIONS FOR AWARDS OR DELOCATIONS	4	34	-30
B71 ORIENT NEWLY ASSIGNED PERSONNEL	30	61	-31
B79 SUPERVISE SEAPONS CONTROL SYSTEMS MECHANICS (AFSC 32152C)	30	61	-31
C118 INDORSE AIRMAN PERFORMANCE REPORTS	9	40	-31
C89 CONDUCT INSPECTIONS	35	66	-31
B68 INITIATE PERSONNEL ACTION REQUESTS, SUCH AS AF FORMS 2095 (ASSIGNMENT/PERSONNEL ACTION)	4	37	-33



TABLE 19

TASKS WHICH BEST DISTINGUISH DAFSC 32152P AND 32172P PERSONNEL  
(PERCENT MEMBERS PERFORMING)

TASKS	DAFSC 32152P (N=99)	DAFSC 32172P (N=33)	DIFFERENCE
V1025 PERFORM FUNCTIONAL CHECKS OF F-4C/D AIM-7 MISSILE FIRING CIRCUITS USING AN/AWM-87 (DF) TEST SET	53	18	+35
I375 SAFETY WIRE WCS COMPONENTS OR FASTENERS	76	45	+31
W1120 REMOVE OR INSTALL F-4C/D TIC COMPONENTS	63	33	+20
I359 PERFORM SOLDERING TECHNIQUES APPLICABLE TO WCS	86	58	+28
I344 CLEAN MAINTENANCE SHOP AREAS, SUCH AS FLOORS AND WALLS	77	48	+29
V999 HARMONIZE F-4C/D CONTINUOUS WAVE (CW) MODULATOR USING AN/APM-383 TEST SETS	71	42	+29
V1003 HARMONIZE F-4C/D INDICATOR CONTROL UNITS (ICU)	73	45	+28
W1113 REMOVE OR INSTALL F-4C/D ELECTRICAL SYNCHRONIZER COMPONENTS	61	33	+28
W1118 REMOVE OR INSTALL F-4C/D RADAR CONTROL POWER SUPPLY COMPONENTS	60	33	+27
W1116 REMOVE OR INSTALL F-4C/D PULSE RECEIVER-TRANSMITTER COMPONENTS	62	36	+26
I368 REMOVE OR INSTALL WCS SOLDERLESS CONNECTORS OR TERMINALS	68	42	+26
V1000 HARMONIZE F-4C/D ELECTRICAL SYNCHRONIZERS USING AN/APM-130 TEST SETS	52	27	+25
A31 PLAN WORK ASSIGNMENTS	10	45	-35
C133 WRITE RECOMMENDATIONS FOR AWARDS OR DECORATIONS	7	42	-35
E221 MAKE ENTRIES ON AFTO FORMS 224 AND 245 (SYSTEM/EQUIPMENT STATUS RECORD)	10	45	-35
E214 MAKE ENTRIES ON AFTO FORMS 623 AND 632A (ON-THE-JOB TRAINING RECORD)	29	70	-41
B69 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	6	48	-42
A43 SCHEDULE WORK ASSIGNMENTS AND PRIORITIES	12	58	-46
B80 SUPERVISE WEAPON CONTROL SYSTEMS MECHANICS (AFSC 32152P)	15	61	-46
B48 COUNSEL SUBORDINATES ON JOB PROGRESSION OR CAREER DEVELOPMENT	14	60	-46
C120 INSPECT PERSONNEL FOR COMPLIANCE WITH MILITARY STANDARDS	14	60	-46
C131 WRITE AIRMAN PERFORMANCE REPORTS	14	60	-46
E215 MAKE ENTRIES ON AF FORMS 797 (JOB QUALIFICATION STANDARD CONTINUATION)	10	58	-48
B49 COUNSEL SUBORDINATES ON PERSONAL OR MILITARY-RELATED MATTERS	16	70	-54

TABLE 20

TASKS WHICH BEST DISTINGUISH DAFSC 32152Q AND 32172Q PERSONNEL  
(PERCENT MEMEBERS PERFORMING)

TASKS	DAFSC 32152Q (N=362)	DAFSC 32172Q (N=139)	DIFFERENCE
L375 SAFETY WIRE WCS COMPONENTS OR FASTENERS	80	44	+36
I344 CLEAN MAINTENANCE SHOP AREAS, SUCH AS FLOORS OR WALLS	74	39	+35
I365 REMOVE OR INSTALL WCS FUSES, LIGHT BULBS, OR TUBES	87	55	+32
L359 PERFORM SOLDERING TECHNIQUES APPLICABLE TO WCS	83	55	+28
I366 REMOVE OR INSTALL WCS MOUNTING BRACKETS OR OR FIXTURES	67	39	+28
I362 REMOVE OR INSTALL DESICCATORS	68	41	+27
I376 SERVICE DESICCATORS	72	45	+27
I353 PACK OR UNPACK WCS COMPONENTS	71	48	+23
I369 REMOVE OR INSTALL WCS WIRING TERMINALS OR CONNECTOR PLUGS	72	49	+23
I368 REMOVE OR INSTALL WCS SOLDERLESS CONNECTORS OR TERMINALS	60	37	+23
I346 CLEAN OR CHANGE WCS AIR FILTERS OR HYDRAULIC FILTERS	58	35	+23
G318 WALK WINGS OR TAILS DURING AIRCRAFT TOWING OPERATIONS	50	28	+22
G294 LAUNCH OR RECOVER AIRCRAFT	34	12	+22
X1154 PERFORM F-4E/G RADAR ANTENNA CHECKS AND ALIGNMENTS	67	46	+21
A22 ESTABLISH WORK SCHEDULES	5	41	-36
A43 SCHEDULE WORK ASSIGNMENTS AND PRIORITIES	11	47	-36
B69 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	10	48	-38
A31 PLAN WORK ASSIGNMENTS	9	47	-38
E215 MAKE ENTRIES ON AF FORMS 797 (JOB QUALIFICATION STANDARD CONTINUATION)	10	49	-39
A23 PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS	12	51	-39
C133 WRITE RECOMMENDATIONS FOR AWARDS OR DECORATIONS	6	46	-40
C214 MAKE ENTRIES ON AF FORMS 623 AND 623A (ON-THE-JOB TRAINING RECORD)	31	74	-43
B48 COUNSEL SUBORDINATES ON JOB PROGRESSION OR CAREER DEVELOPMENT	20	63	-43
B49 COUNSEL SUBORDINATES ON PERSONAL OR MILITARY-RELATED MATTERS	21	64	-43
B81 SUPERVISE WEAPON CONTROL SYSTEMS MECHANICS (AFSC 32152Q)	22	68	-46

## TAFMS ANALYSIS

In addition to analysis of skill-level jobs, separate analysis of jobs by enlistment groups sometimes helps to show how those jobs change as people gain more experience. In this survey, however, the analysis by enlistment group closely paralleled the analysis by skill level. For that reason, data from the enlistment group job analysis are not reported. (Nevertheless, a detailed description of first-enlistment jobs is presented in the training analysis as a prelude to evaluating career ladder training documents.) Thus, this section now turns to an analysis of the job satisfaction of career field personnel by enlistment group. This analysis is particularly useful for at least two reasons. First, previous research by the Air Force Human Resources Laboratory has shown that overall career ladder job satisfaction tends to improve as length of service increases--mainly because dissatisfied personnel tend not to make careers of the Air Force, thus leaving only satisfied members in the more senior enlistment groups. Analyzing job satisfaction by enlistment group, then, takes the influence of time in service into account and so permits clearer interpretation of job satisfaction data. Second, the Air Force Occupational Analysis Program has built up a large job satisfaction data base across several AFSCs by enlistment group. Thus, organizing job satisfaction data from this survey by enlistment group permits comparison with the larger data base to determine how the 321X2/X career field compares to other Air Force career fields. This kind of comparison may highlight morale problems that might not otherwise have been apparent.

### Job Satisfaction of TAFMS Groups

Overall, career field job satisfaction appeared very comparable to that of other maintenance-related specialties. Table 21 displays the job satisfaction data for all 321X2X personnel surveyed and for all personnel in similar career fields surveyed in 1983. As is apparent from the table, first- and second-enlistment members were about as satisfied with their jobs as personnel in the comparison groups. In fact, second-enlistment personnel may be even more satisfied than comparison personnel. Surprisingly, then, career personnel (with 97 or more months of service) were noticeably less satisfied than comparison career members. This relative dissatisfaction among career weapon control systems personnel was evident on all satisfaction indexes except "plan to reenlist".

Of course, the preceding findings resulted from combining job satisfaction data from across weapon control system shreds. To determine whether job satisfaction systematically differed between shreds, the data were further analyzed for each shred separately. Tables 22, 23, and 24 compare shred data for first-enlistment, second-enlistment, and career personnel, respectively. Several differences between shreds are evident in the three tables. First, 321X2 personnel appeared to be the least satisfied group in the sample, regardless of enlistment. This finding, of course, is consistent with the low job satisfaction of A-10 personnel found in the SPECIALTY JOBS analysis and with write-in comments received from A-10 mechanics. Second,

while 321X2P first-termers seemed more satisfied than other 321X2X first-termers, 321X2P second-term and career personnel seemed less satisfied than their peers. Note especially the unusually high percentage of 321X2P career members who said they were not satisfied with the sense of accomplishment derived from their jobs. No explanation for the seeming reverse in job satisfaction among 321X2P personnel is apparent from the survey data. Third, 321X2A and C personnel seemed to be the most satisfied second-enlistment and career members in the sample. Finally, Table 24 throws additional light on the relative dissatisfaction of career personnel noted earlier. Note that career personnel in the A and C shreds generally appear as satisfied, if not more so, as personnel in the 1983 comparison groups. At the same time, personnel in the "slick", P and Q shreds all appeared less satisfied than comparison personnel.

Taken together, the three tables suggest that, for whatever reason, weapon control systems personnel fall into three groups based on their degree of job satisfaction: 321X2 personnel, who are clearly the least satisfied in the career ladder; 321X2A and C personnel, who generally seemed to be the most satisfied group; and 321X2P and Q personnel, who appear somewhere in between the two extremes. These three groups, of course, correspond rather directly to the A-10, F-106, and F-4 systems, respectively.

TABLE 21

**JOB SATISFACTION OF 321X2X PERSONNEL COMPARED TO  
PERSONNEL IN SIMILAR CAREER LADDERS\*  
(PERCENT RESPONDING\*\*)**

	<u>FIRST- ENLISTMENT</u>		<u>SECOND- ENLISTMENT</u>		<u>CAREER</u>	
	<u>321X2X</u>	<u>COMP DATA</u>	<u>321X2X</u>	<u>COMP DATA</u>	<u>321X2X</u>	<u>COMP DATA</u>
<b><u>FINDS JOB:</u></b>						
DULL	9	10	6	12	10	7
SO-SO	18	18	15	15	17	12
INTERESTING	73	70	78	72	72	79
<b><u>FEELS TALENTS USED:</u></b>						
LITTLE OR NOT AT ALL	24	20	16	19	23	15
FAIRLY WELL OR BETTER	76	80	83	81	76	84
<b><u>FEELS TRAINING USED:</u></b>						
LITTLE OR NOT AT ALL	17	20	16	22	29	19
FAIRLY WELL OR BETTER	83	79	83	78	70	80
<b><u>SATISFIED WITH SENSE OF ACCOMPLISHMENT:</u></b>						
NO	17	16	13	20	22	18
AMBIVALENT	11	13	10	11	11	9
YES	71	71	76	69	66	73
<b><u>PLAN TO REENLIST</u></b>						
WILL RETIRE	0	0	0	0	16	19
NO	42	46	23	29	10	8
YES	56	53	74	70	72	72

\* 1983 data from AFSs 305X4, 324X0, 328X5, 423X1, 423X5, and 464X0

\*\* Column totals may not equal 100 percent if items were left blank

TABLE 22

COMPARISON OF FIRST-ENLISTMENT JOB SATISFACTION ACROSS  
WEAPON CONTROL SYSTEM SHREDS  
(PERCENT RESPONDING\*)

	FIRST-ENLISTMENT PERSONNEL				
	COMP DATA**	321X2	321X2A	321X2P	321X2Q
<u>FINDS JOB:</u>					
DULL	10	17	12	7	6
SO-SO	18	22	17	9	19
INTERESTING	70	62	71	84	74
<u>FEELS TALENTS USED:</u>					
LITTLE OR NOT AT ALL	20	40	24	15	21
FAIRLY WELL OR BETTER	80	60	76	85	79
<u>FEELS TRAINING USED:</u>					
LITTLE OR NOT AT ALL	20	39	14	10	13
FAIRLY WELL OR BETTER	79	60	86	89	87
<u>SATISFIED WITH SENSE OF ACCOMPLISHMENT:</u>					
NO	16	20	22	13	17
AMBIVALENT	13	12	12	9	11
YES	71	68	66	77	72
<u>PLAN TO REENLIST:</u>					
WILL RETIRE	0	0	0	0	0
NO	46	39	46	37	44
YES	53	61	52	59	55

\* Column totals may not equal 100 percent if items were left blank

\*\* 1983 data from AFSs 305X4, 324X0, 328X5, 423X1, 423X5, and 464X0

TABLE 23

COMPARISON OF SECOND-ENLISTMENT JOB SATISFACTION ACROSS  
WEAPON CONTROL SYSTEM SHREDS  
(PERCENT RESPONDING\*)

	SECOND-ENLISTMENT PERSONNEL					
	COMP DATA**	<u>321X2</u>	<u>321X2A</u>	<u>321X2C</u>	<u>321X2P</u>	<u>321X2Q</u>
<u>FINDS JOB:</u>						
DULL	12	7	6	0	0	8
SO-SO	15	33	14	13	32	9
INTERESTING	72	53	80	87	64	83
<u>FEELS TALENTS USED:</u>						
LITTLE OR NOT AT ALL	19	27	8	7	14	19
FAIRLY WELL OR BETTER	81	67	92	93	82	80
<u>FEELS TRAINING USED:</u>						
LITTLE OR NOT AT ALL	22	33	10	7	14	18
FAIRLY WELL OR BETTER	78	67	90	93	82	82
<u>SATISFIED WITH SENSE OF ACCOMPLISHMENT:</u>						
NO	20	13	14	0	14	15
AMBIVALENT	11	13	6	0	18	12
YES	69	74	80	100	63	72
<u>PLAN TO REENLIST:</u>						
WILL RETIRE	0	0	0	0	0	0
NO	29	20	35	33	14	18
YES	70	73	63	67	73	80

\* Column totals may not equal 100 percent if items were left blank

\*\* 1983 data from AFSs 305X4, 324X0, 328X5, 423X1, 423X5, and 464X0

TABLE 24

COMPARISON OF CAREER JOB SATISFACTION ACROSS  
WEAPON CONTROL SYSTEM SHREDS  
(PERCENT RESPONDING\*)

	CAREER PERSONNEL					
	COMP DATA**	321X2	321X2A	321X2C	321X2P	321X2Q
<u>FINDS JOB:</u>						
DULL	7	14	8	4	18	9
SO-SO	12	18	13	7	21	22
INTERESTING	79	69	79	82	61	69
<u>FEELS TALENTS USED:</u>						
LITTLE OR NOT AT ALL	15	35	15	9	33	25
FAIRLY WELL OR BETTER	84	65	84	87	67	75
<u>FEELS TRAINING USED:</u>						
LITTLE OR NOT AT ALL	19	41	22	22	33	30
FAIRLY WELL OR BETTER	80	59	78	73	67	70
<u>SATISFIED WITH SENSE OF ACCOMPLISHMENT:</u>						
NO	18	28	15	4	45	23
AMBIVALENT	9	10	12	7	6	14
YES	73	62	73	85	49	63
<u>PLAN TO REENLIST:</u>						
WILL RETIRE	19	12	13	18	15	19
NO	8	10	9	9	9	11
YES	72	77	78	69	73	69

\* Column totals may not equal 100 percent if items were left blank

\*\* 1983 data from AFSs 305X4, 324X0, 328X5, 423X1, 423X5, and 464X0



## TRAINING ANALYSIS

One of the major uses of job analysis data is to help determine the content of career ladder training programs. Normally, existing training programs are controlled by a Specialty Training Standard (STS), which dictates how proficient airmen at a specific skill level should be in performing particular tasks, and Plans of Instruction (POI), which state the criterion objectives for specific resident courses. Therefore, one way to apply job data to training programs is to relate the data to the career ladder STS and POI.

Currently, the resident technical school at Lowry AFB offers initial AFSC-awarding courses for the 321X2, 321X2A, 321X2P, and 321X2Q specialties. Of these, only the 3ABR23132-002 (slick) and 3ABR32132Q courses have a significant flow of active Air Force students. The other courses continue to operate but, with the continuing conversion of the F-106 and F-4 C and D aircraft to the Air National Guard, few, if any, students are active Air Force personnel. Since no data were collected from Guard personnel, the technical school agreed that only the "slick" and Q-shred courses be studied.

To evaluate the "slick" and Q-shred training programs, tasks from the job inventory were first matched to each STS by technical school personnel. These matches were reviewed for accuracy three times: once by personnel in the Occupational Measurement Center's Data Applications Section, again by the occupational analyst, and finally by the personnel at the technical school. Following the STS matches, inventory tasks were also matched to the course POIs, with the matches reviewed for accuracy as just described.

Since the focus of this analysis is on initial resident training, a detailed description of the jobs of first-enlistment personnel will be presented before discussion of the STS and POI analyses. These job descriptions will then form a framework within which the STS and POI discussions can be understood.

### First-Enlistment Job Descriptions

One issue that has been under discussion is whether there is enough in common between 321X2 and 321X2Q first-enlistment jobs to allow all or part of their training to be conducted in a single course. Naturally, airmen in these two specialties work on different aircraft systems and, as already shown in the SPECIALTY JOBS section of this report, perform several distinctly different tasks based on the system maintained. (Figures 2 and 3 show the specific job group in which 321X2 and 321X2Q first-termers appeared.) Nevertheless, an examination of the specific equipment used in their jobs suggested there may be some overlap between the jobs performed by first-termers in the two specialties.

Taken together, Tables 25, 26, and 27 show all items of test, shop, and ground equipment used or maintained by at least 10 percent of first-termers within each of the 321X2 and 321X2Q specialties. Table 25 lists equipment

used or maintained by 30 percent or more of 321X2 first-termers, and also gives the percentages of 321X2Q airmen using or maintaining the same equipment. Table 26 lists equipment used or maintained by 30 percent or more 321X2Q first-termers not already displayed in the previous table, and also gives the percentages for 321X2 airmen. Finally, Table 27 displays all items of equipment used or maintained by at least 10 percent of either group, but which were not listed in the first two tables.

As the three tables taken together clearly show, 321X2Q first-termers work with the same equipment that 321X2 first-termers work with. Of course, the tables also show that 321X2Q airmen generally work with several items of equipment that 321X2 airmen do not. This "one-way overlap" between the two specialties may suggest that some portions of the two courses could be merged into a single common block or set of blocks of instruction. When students completed this common training, they would then enter separate, follow-on blocks of instruction for their system-specific training.

Whether the equipment overlap evident in Tables 25, 26, and 27 would actually permit some common training for the two specialties probably depends, in part, on whether the common equipment is used in the same way in both specialties. A related consideration is whether the particular items of common equipment could all be included in generic training prior to system-specific training. For example, students may need to learn something about the system they will maintain before training on a specific item of common equipment would be meaningful to them. If this were the case, then sequencing problems could make common training impractical. Thus, course managers should look at the items of common equipment (primarily listed in Table 25) to determine whether their inclusion in common, generic training is desirable.

Several other issues regarding first-enlistment jobs also need to be discussed. One of these concerns precisely which aircraft systems should be emphasized in each course. Table 28 displays the percentages of 321X2 and 321X2Q first-termers who maintained each of the various, applicable aircraft systems. As the table depicts, 321X2 unshredded airmen are far more likely to work on the A-10A than any other system, suggesting that their initial training should emphasize the A-10A. Currently, the emphasis in the 321X2 course is on the A-7. As for 321X2Q airmen, the table indicates their training should emphasize the F-4E system, while some attention also should be given to unique aspects of the F-4G as well.

A third issue revolves around two questions. First, should initial training prepare airmen for both flightline and shop jobs, or should one receive emphasis over the other? Second, if flightline training is included, should attention be given to special cross-utilization tasks performed under the COMO management system? Figures 2 and 3 help to answer the first question. As evident in the two figures, 321X2 and 321X2Q first-termers were likely to work in either flightline or shop maintenance. Thus, both courses should focus on both kinds of maintenance since first-termers are about equally likely to work in either flightline or shop jobs.

TABLE 25

TEST, SHOP, OR GROUND EQUIPMENT MAINTAINED OR USED BY AT  
LEAST 30 PERCENT of 321X2 FIRST-TERMERS

<u>TEST/SHOP/GROUND EQUIPMENT</u>	<u>PERCENT OF FIRST-TERMERS USING OR MAINTAINING</u>	
	<u>321X2</u>	<u>321X2Q</u>
MULTIMETERS	91*	87*
DIGITAL VOLTMETERS	79*	86*
OSCILLOSCOPES	64*	92*
INTERFACE TEST SETS	55*	45*
POWER UNITS	48*	68*
AN/ASM-184B, WEAPON CONTROL TEST SETS	48*	56*
POWER SUPPLIES	47	64
RADAR TEST SETS	40*	84*
OPTICAL ALIGNMENT SETS	39*	58*
DIFFERENTIAL VOLTMETERS	37*	77*
BREAKOUT BOXES	33*	67*
AMMETERS	43	34
POWER METERS	30*	41*
SIGNAL GENERATORS	30*	23*

\* Currently included in the initial, AFSC-awarding course

TABLE 26

TEST, SHOP, OR GROUND EQUIPMENT MAINTAINED OR USED BY AT  
LEAST 30 PERCENT OF 321X2Q FIRST-TERMERS ONLY

TEST/SHOP/GROUND EQUIPMENT	PERCENT OF FIRST-TERMERS USING OR MAINTAINING	
	321X2Q	321X2
COMPRESSOR-DEHYDRATORS	89*	13*
AN/APM-383, RADAR TEST SETS	84*	4
RADAR PRESSURE TEST SETS	74*	18
PRESSURE GAUGES	72*	24*
AIR CONDITIONERS	64*	8*
TS-2059/AWN-18, PSEUDO AND RADIO FREQUENCY POWER TEST SETS	66*	2
AN/AWM-88, FIRE CONTROL SYSTEM TEST SETS	63*	5
AN/UPM-141, RADAR TEST SETS	62*	19*
DUMMY LOADS	61*	24*
ANTENNAS	58*	22*
DIRECTIONAL COUPLERS	53*	8*
STROBOSCOPES	53*	3
ATTENUATORS	49*	20*
AN/AWA-6A, COOLING/PUMPING UNITS	47*	2
TRANSMITTERS	43*	20*
AN/UPM-145, RADAR TEST SETS	43*	7
AN/APM-283, RADAR TEST SETS	42*	2
RECEIVERS	41*	20*
MAVERICK INTERFACE TEST SETS, 53E150525-1	41*	18
FREQNCY COUNTERS	40*	22*
AN/APM-282, COMPUTER TEST SETS	39	1
AIR COMPRESSORS	35	8
MODULATORS	0*	8*
VACUUM TUBE BOLTMETERS	30*	11

\* Currently included in the initial, AFSC-awarding course

TABLE 27

TEST, SHOP, OR GROUND EQUIPMENT MAINTAINED OR USED BY BETWEEN  
10 TO 29 PERCENT OF 321X2 AND 321X2Q PERSONNEL

<u>TEST/SHOP/GROUND EQUIPMENT</u>	<u>PERCENT OF FIRST-TERMERS USING OR MAINTAINING</u>	
	<u>321X2</u>	<u>321X2Q</u>
PULSE GENERATORS	26*	26*
AN/AWN-69, MAVERICK INTERFACE TESTERS	23*	14
PHASE ANGLE VOLTMETERS	19	5
DECADE RESISTERS	18	9
SWEEP OSCILLATORS	11*	20*
RESOLVER STANDARDS	10	11
HEATERS	8	16
MEGOHMMETERS	8	16
CRYSTAL DIODE DETECTORS	7	15
AN/AWN-65, TV TEST SETS	6	21*
FREQUENCY RESPONSE TEST SETS	5	11
AN/ASM-253, LEAD COMPUTING OPTICAL SIGHT TEST SETS	5	11*
MICROWAVE AMPLIFIERS	4	17
AN/ASM-322, LEAD COMPUTING OPTICAL SIGHT TEST SETS	4	25*
TUNABLE BAND PASS FILTERS	3*	10*
MU-686/APT-120(V) TARGET INFORMATION RETRIEVAL SYSTEM MEMORY UNITS	1	28*
AN/APM-307(V), INTERCEPT WEAPON SYSTEM TEST STATIONS	1	25*
AN/AWN-37, FIRE CONTROL SYSTEM TEST BENCH SETS	1	19*
TS-3810/AWN-37E, TUNING DRIVE TEST SETS	1	17*
ROTARY PRINTERS	1	16*
AN/AWN-20, FIRE CONTROL SYSTEM TEST SETS	1	10*
AN/APM-420, COMPUTER LOGIC UNIT TEST SETS	0	19*

\* Currently included in the initial, AFSC-awarding course

TABLE 28

AIRCRAFT SYSTEMS MAINTAINED BY  
321X2 AND 321X2Q FIRST-TERMERS

<u>AIRCRAFT SYSTEM</u>	<u>PERCENT OF FIRST-TERMERS MAINTAINING</u>	
	<u>321X2</u>	<u>321X2Q</u>
A-10A	69	1*
F-5E	17	0
F-5F	11	0
AC-130H	10	0
F-4E	10*	93
F-4G	0	35

\* These personnel worked in combined units where they maintained both A-10 and F-4 systems

**FIGURE 2**  
**DISTRIBUTION OF 321X2 FIRST-TERMERS ACROSS JOB GROUPS**  
**(N=107)**

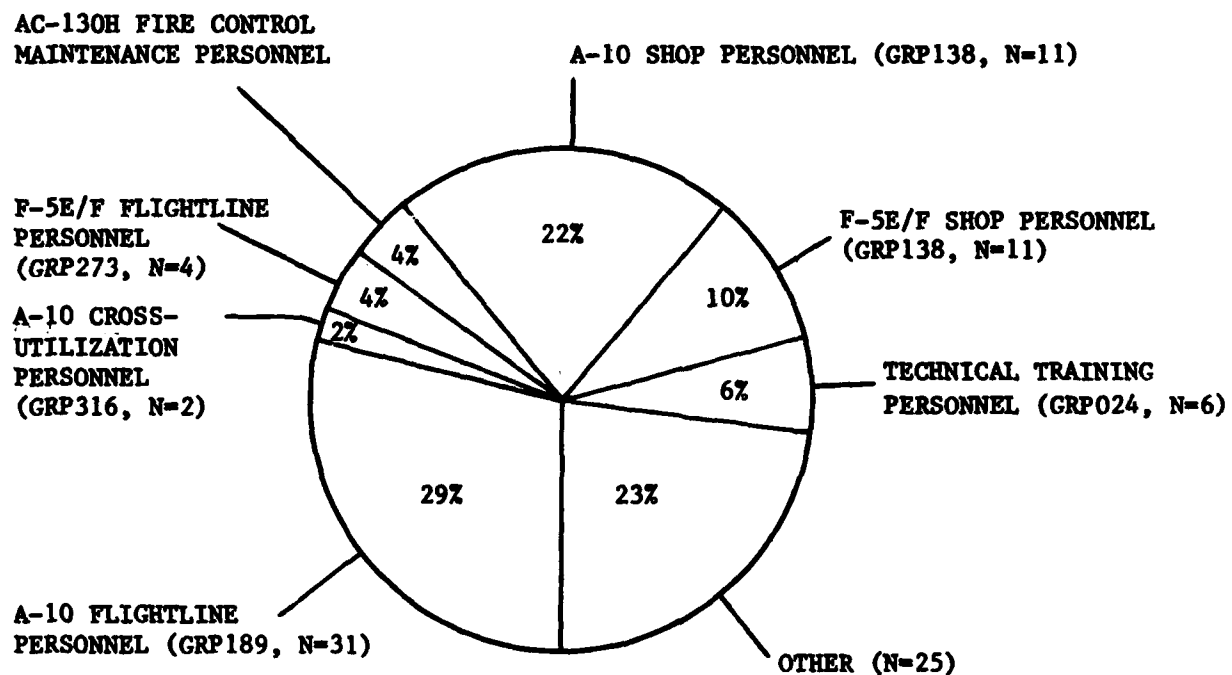


FIGURE 3

DISTRIBUTION OF 321X2Q FIRST-TERMERS ACROSS JOB GROUPS  
(N=351)

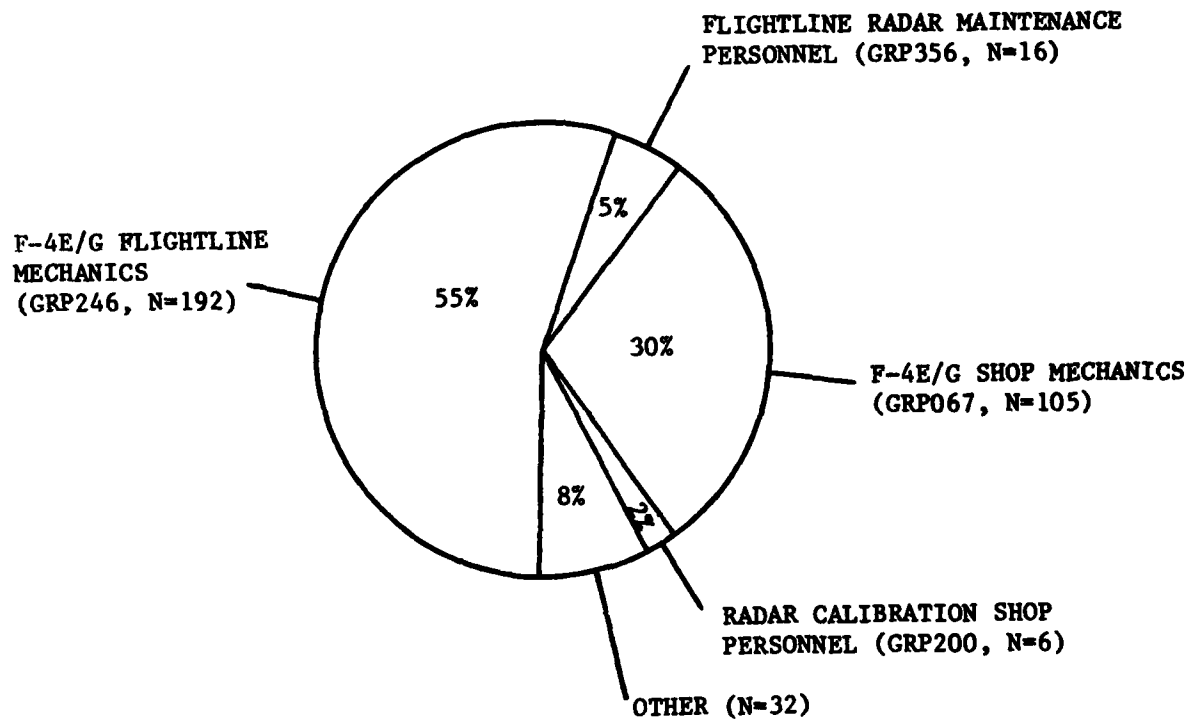




Table 29 helps to answer the question of whether the courses should include training on cross-utilization tasks. Note that over 80 percent of all first-termers in both specialties were under COMO. Since weapon control systems specialists would be expected to perform cross-utilization tasks under COMO, such tasks could be a part of the job description of up to 38 percent of the 321X2 first-termers, and up to 45 percent of the 321X2Q first-termers (see the percents assigned to aircraft generation squadrons displayed in the table). Tables 30 and 31 display those cross-utilization tasks actually performed by 321X2 and 321X2Q first-termers, respectively. These tables show that only a few cross-utilization tasks were performed by the expected percentages of airmen. The number of cross-utilization tasks performed in both specialties was small, and the percentages of airmen performing them was generally less than 30 percent. As a result, there does not appear to be a major need to provide training on cross-utilization tasks in the basic course. Such training could be deferred to OJT administered by aircraft maintenance units.

#### Analysis of Training Documents: Introduction

The preceding discussion presents a general outline of what should be covered in 321X2 and 321X2Q initial training, and establishes a background for evaluating the appropriate STSs and POIs. As described earlier, technical school personnel did the actual matching of specific job inventory task statements to the corresponding STS items and POI criterion objectives. These matches were entered into the CODAP computer system and training documents annotated with actual job data were then produced. Data provided in the annotated documents include the percent of people performing each matched task, as well as the training emphasis and task difficulty ratings assigned to each of those tasks. In addition, the annotated documents also include a listing of all tasks not matched, along with the same types of task data just described.

Training emphasis and task difficulty ratings have not been discussed until now, since their use is secondary to percent performing data. As stated in AFR 52-22, Technical Training: Occupational Analysis Program, percent performing data are the primary basis for making training decisions, with training emphasis and task difficulty used mainly to adjust those decisions. What follows is a discussion of training emphasis and task difficulty ratings obtained in this survey. Following that discussion, the 321X2 and 321X2Q STSs and POIs will be examined in some detail in light of percent performing data, with training emphasis and task difficulty ratings taken into consideration.

Training Emphasis and Task Difficulty Ratings. As discussed in the SURVEY METHODOLOGY section, training emphasis and task difficulty ratings were collected from senior career field personnel for each task in the job inventory. Examples of both high and low ratings obtained are given in Tables 32 through 35 to illustrate the types of tasks considered important in training by the field.

TABLE 29

COMO ORGANIZATIONS 321X2 AND 321X2Q FIRST-TERMERS WORK IN

<u>COMO ORGANIZATION</u>	<u>PERCENT OF FIRST-TERMERS WORKING IN ORGANIZATION</u>	
	<u>321X2</u>	<u>321X2Q</u>
AIRCRAFT GENERATION SQUADRON	38	45
COMPONENT REPAIR SQUADRON	36	38
OTHER COMO ORGANIZATION	7	5
PERCENT UNDER COMO	81	88
PERCENT <u>NOT</u> UNDER COMO	19	12

Tables 32 and 33 also illustrate the typical relationship between training emphasis ratings and the percent of first-termers performing tasks. Note that all of the tasks rated extremely low in training emphasis were performed by very few first-termers, while most tasks with high training emphasis ratings were performed by large percentages of the first-termers sample. This apparent relationship reflects the fact that training emphasis ratings are usually higher for tasks performed by larger numbers of first-termers. Sometimes, however, a task relatively low in percent performing will still receive a high training emphasis rating (e.g., task I355 in Table 32). Usually, this indicates that proficient performance of the task is critical to mission success or to safety. Such tasks should normally receive greater emphasis in first-termers training programs than percent performing data alone would suggest.

Several tasks in both specialties were rated high in training emphasis. Besides those shown in Tables 32, 321X2 tasks given high ratings included:

- perform operational built-in-test (BIT) checks of A-10 HUD systems
- perform operational BIT checks of A-10 TV monitors
- remove and install A-10 TV projection units
- remove and install A-10 standby reticle lamps
- static ground aircraft
- remove and install A-10 TV control units
- remove and install A-10 TV monitors
- perform soldering techniques applicable to WCS
- perform A-10 HUD control units functional checks
- perform A-10 projection units functional checks
- perform minimum performance checks on A-10 HUD
- remove or install A-10 HUD control units
- make entries on AF Forms 797 (Job Qualification Standard Continuation)
- perform A-10 ESG functional checks
- perform minimum performance checks on A-10 TV monitors

As the above suggests, A-10 system maintenance tasks made up the majority of those rated high in training emphasis. Of course, this finding is not surprising since the A-10 system was also the one most commonly maintained by 321X2 first-termers.

In the 321X2Q specialty, where the F-4E/G system was the only system maintained, system maintenance tasks generally were rated higher in training emphasis than other types of tasks. Besides those shown in Table 33, tasks with especially high ratings included:

- isolate malfunctions within F-4E/G optical sight systems
- isolate malfunctions within F-4E/G indicator groups
- isolate malfunctions within F-4E/G power distribution circuits

- isolate malfunctions within F-4E/G range track loops
- isolate malfunctions within F-4E/G continuous wave circuits
- perform soldering techniques applicable to WCS
- repair aircraft wiring
- isolate faults of related system malfunctions
- align F-4E/G modulator oscillators
- remove or install WCS wiring terminals or connector plugs
- isolate malfunctions to associated aircraft equipment
  - such as relay panels or aircraft wiring
- boresight F-4E/G optical sight systems
- harmonize F-4E/G radar subsystems
- align F-4E/G DSCG intra-target data indicators (LRU-12, 13)
- bench check F-4E/G waveguide assemblies (LRU-19)

A large number of these tasks obviously involve fault isolation activities. This fact suggests that first-termers should receive substantial performance-level training in how to isolate malfunctions in F-4E/G systems.

While training emphasis ratings appeared directly related to the percent of first-termers performing tasks, task difficulty ratings did not. In fact, as is evident in Tables 34 and 35, the most difficult tasks were often performed by only a few first-termers. (This finding probably reflects the tendency of more difficult tasks to be performed by the more senior, experienced career ladder members.) Generally, task difficulty ratings normally vary independently from percent performing data and, as one would expect, from training emphasis as well. With this independence in mind, one way to interpret task difficulty ratings is as a relative index of the time needed to learn to do a task. Thus, regardless of training emphasis ratings and percent performing data, an average airman will usually need more time to master a task rated high in difficulty than a task rated lower.

In addition to the tasks listed in Table 34, some tasks often performed by 321X2 first-termers were also rated above average in task difficulty. Among these tasks were:

- repair aircraft wiring
- perform soldering techniques applicable to WCS
- perform A-10 ESG functional checks
- isolate and correct malfunctions within A-10 TV monitors
- isolate and correct malfunctions within A-10 PU
- align A-10 TV monitors
- operate A-10 HUD boresight reference tools and theodolites
- test WCS solid-state devices

Similarly, several tasks typical of 321X2Q first-termers also had average difficulty ratings. Some of these were:

isolate malfunctions within F-4E/G AIM-7 missile firing circuits  
isolate malfunctions within F-4E/G angle track loops  
repair aircraft wiring  
isolate and correct malfunctions in F-4E/G waveguide assemblies (LRU-19)  
isolate and correct malfunctions in F-4E/G antennas (LRU-16)  
isolate and correct malfunctions in F-4E/G radar transmitters (LRU-5)  
perform F-4E/G range track checks using AN/UPM-141 test sets  
isolate and correct malfunctions in F-4E/G modulator oscillators (LRU-3)

### 321X2 Training Documents

The 321X2 STS. Normally, an STS is intended to cover all tasks that airmen are likely to perform at some point in their careers. To translate this objective into a measurable goal, a 10 percent performing rule could be applied. The reasoning is that if at least 10 percent of a group perform a task, then there is a reasonable probability that other airmen will also perform that task sometime in the future. Therefore, an STS should at least cover all tasks performed by 10 percent or more of the 3-, 5-, or 7-skill level groups. In addition, tasks performed by less than 10 percent, but which are high in training emphasis, should also be included. As a practical matter, substituting first-enlistment personnel for the 3-skill level group normally is desirable, since the latter is usually very small in number and, as a result, often yields relatively unstable percent performing data.

Applying the above 10 percent rule to the 321X2 STS led to the following results. Of the 1,259 tasks in the job inventory, 846 tasks were not matched to the STS. Only 100 of these tasks met or exceeded the 10 percent rule and, therefore, qualified to be covered by the STS. Forty of these 100 tasks were applicable mainly to just 7-skill level personnel, only one was applicable to 5-skill level members alone; 4 were applicable to first-termers alone; and 55 were applicable to more than one of these groups. Table 36 lists examples of these latter tasks to illustrate those areas in which the STS could be expanded.

As the table indicates, several tasks involving removing and installing A-10 system components were among those not matched. Discussions with technical school personnel revealed such tasks had not been included in the STS, since their inclusion would have obligated the technical school to provide training on them--a type of training the school cannot economically provide. (This situation is not unusual, being quite common in equipment maintenance specialties. Remove and install types of training are usually quite costly since removing the same item several times for each student in a class causes extreme physical wear on the item and its fastening devices.) Nevertheless, these tasks should be covered by the STS to at least document on-the-job training needs. Perhaps a solution would be to include remove

and install tasks in the STS, while coding the 3-skill level column as a 2b/-. This coding would indicate that first-term airmen need training on those tasks, but that training is to be provided through OJT.

The 3ABR32132-002 POI. While the STS should comprehensively document all career ladder training needs, the POI should document how the basic, AFSC-awarding course meets first-term training needs. The basic elements of the POI--the criterion objectives--spell out precisely what tasks the course will teach students to perform and how it will determine whether students have actually learned to perform those tasks. Thus, every first-term task that requires formal, resident training should be covered by a criterion objective. Three general guidelines for determining whether a task does require formal, resident training are given in ATCR 52-22:

- (1) tasks performed by at least 50 percent of first-term personnel should be trained to a performance level in the basic, resident course;
- (2) tasks performed by between 30 and 49 percent of the first-termers should be trained to a knowledge level in the basic course;
- (3) and tasks performed by less than 30 percent of the first-termers should be deferred to OJT or some other type of follow-on training

When these guidelines are conscientiously applied, the result is a basic, resident course that provides the best training for the fewest dollars.

Application of the above guidelines to the 3ABR32132-002 POI raised the same issue noted in the SPECIALTY JOBS analysis: the course trains airmen on the A-7 system, while few course graduates maintain that system. Instead, most work on the A-10 and a small but sizeable group maintain the F-5 system. In terms of the course's overall success in meeting first-term training needs, Table 37 shows how well the course performed. As noted in the table, the composite 321X2 first-term job description contained 790 tasks. Of these, only 58 tasks qualified for resident training under ATCR 52-22 guidelines, but only 2 were covered by the POI. Those two tasks were:

research technical orders to identify components or items  
of equipment (62 percent performing)  
perform periodic inspections of WCS test stations or test  
equipment (50 percent performing)

Examples of some of the remaining 56 qualifying tasks not covered by the POI are shown in Table 38. As indicated above, many of these tasks concern maintenance of the A-10 system. Finally, 732 tasks did not qualify for training; the course did cover 28 of these. These 28 tasks were mainly A-7 shop or flightline tasks and are represented in Table 39.

Technical school personnel recognize that the A-7 system is not widely maintained by course graduates. Their rationale for using the A-7 system in the course is that the system is a good generic example applicable to the A-10 and F-5 systems. That is, what a student needs to learn to maintain the A-7 system generalizes very well to the A-10 and F-5 systems. Some data from this survey may lend support to that line of reasoning. Referring back to Tables 25, 26, and 27, which display equipment used or maintained by 321X2 first-term airmen, note that nearly all the equipment used or maintained by most of these first-termers was included in the course. Further, observe that few equipment items not used or maintained were covered by the course. As a comparison of the 321X2 and 321X2Q data in those tables will attest, exactly what equipment is used or maintained seems to be related to the aircraft system worked on. Thus, the fact that the course includes the same equipment actually used in the field suggests that the A-7 system may be generalizable to the A-10 and F-5 systems. Nevertheless, this finding is not conclusive since the 321X2 equipment covered in the course is also used or maintained by 321X2Q personnel, yet the A-7 system covered in the "slick" course is considerably different from the F-4 system maintained by Q-shred personnel. Thus, a more rigorous study of how well training on the A-7 transfers to the A-10 appears to be needed. But, in the long run, the best solution may simply to be obtain an A-10 trainer.

#### 321X2Q Training Documents

The 321X2Q STS. The same types of analysis used for the 321X2 STS and POI were applied to the 321X2Q training documents as well. Overall, the results of the 321X2Q STS analysis were similar to those for the 321X2 document. Of the 1,259 tasks in the career field job inventory, 344 qualified for inclusion in the 321X2Q STS. Two hundred of these tasks were matched to the STS, but 144 tasks were not. About half of these unmatched tasks applied to 7-skill level personnel only. The rest of the unmatched tasks (79 in number) applied to more than one of the three STS groups (i.e., first-termers, 5-skill level personnel, and 7-skill level personnel). Table 40 gives examples of some of these tasks. Note that, as with the 321X2 STS, several "remove and install" types of tasks were not covered by the STS. Nevertheless, the table also suggests that the STS did cover most system-specific tasks, since only a handful of such tasks were not matched to the STS. Thus, most unmatched tasks were general in nature, applicable to several different weapon control systems. While, as indicated, several of these tasks were of the "remove and install" variety, several others were troubleshooting types of tasks. Apparently, the 321X2Q STS needs expanding in some areas of troubleshooting and repairing weapon control systems.

The 3ABR32132Q POI. Analysis of the 3ABR321X2Q POI suggested the course may need to be significantly expanded. Table 41 shows how the POI compared to survey data. As indicated, 142 tasks qualified for initial resident training, but only 29 of those tasks were matched to the POI. Examples of the qualified, but unmatched, tasks are displayed in Table 42. Many of these tasks were not matched because the course does not use actual aircraft in training but, instead, uses a weapon control system trainer along with simulated pilot controls. As a result, tasks involving the aircraft superstructure

such as "open and close radomes" and "repair aircraft wiring" cannot be taught in the course at present. Other unmatched tasks included shop or depot-level maintenance tasks, but most of these were performed by less than half of the 321X2Q first-termers.

Table 42 also indicates that the POI covered only two tasks unqualified for coverage. Those two tasks were:

perform F-4E/G range track checks using AN/UPM-145 test sets  
perform checks and alignments of F-4E/G radar functions using AN/APM-283A test sets

Nevertheless, the criterion objectives covering these two tasks were supported by other tasks that did quality for coverage.

In short, evaluation of the 3ABR321X2Q POI revealed that the course's present criterion objectives appeared justified by occupational survey data, while additional criterion objectives were needed to provide performance-level training in fault isolation procedures and knowledge-level training in shop and depot-level maintenance. Further, some means of training airmen in tasks involving the weapon control system superstructure may need to be added to the course.

#### Summary of Training Analysis

Several areas for improvement in weapon control systems maintenance training have been identified in both the 321X2 and 321X2Q career ladders. Among these, obtaining an A-10 trainer for the "slick" basic resident course seems to be at the top of the list. Not far behind may be a need to obtain actual A-10 and F-4E aircraft to supplement the equipment trainers used in the "slick" and Q-shred courses, respectively. If such aircraft were physically present in the courses, then training on aircraft superstructure-related maintenance tasks could be more readily provided. An additional, equally pressing need exists to expand entry-level training in performing troubleshooting tasks and in shop-level repair of defective components. Finally, several remove and replace types of tasks should be added to both STSs. If these tasks should not or cannot be trained in the basic resident course, then the 3-skill level column of the STS could be coded to reflect that fact. By implementing the above changes in the STSs and basic courses, 321X2 and 321X2Q airmen can be more effectively trained to perform their jobs as they enter and progress in their respective career ladders.



TABLE 30

CROSS-UTILIZATION TASKS PERFORMED BY  
10 PERCENT OR MORE 321X2 FIRST-TERMERS

<u>TASKS</u>	<u>PERCENT PERFORMING</u>
G318 WALK WINGS OR TAILS DURING AIRCRAFT TOWING OPERATIONS	42*
G304 POSITION OR REMOVE AIRCRAFT CHOCKS	39*
G294 LAUNCH OR RECOVER AIRCRAFT	35
G314 STATIC GROUND AIRCRAFT	24
G301 PERFORM SINGLE-POINT AIRCRAFT REFUELING OR DEFUELING	21
G307 REMOVE OR INSTALL AIRCRAFT PODS	15
G305 REMOVE OR INSTALL AIRCRAFT EXTERNAL FUEL TANKS	15
G316 TOW NONPOWERED AGE	11
G290 BLEED OR SERVICE BRAKE SYSTEMS	11

\* Since these percentages exceed that of first-termers assigned to COMO aircraft generation squadrons, some personnel outside such squadrons must also be performing these two tasks

TABLE 31

CROSS-UTILIZATION TASKS PERFORMED BY  
10 PERCENT OR MORE 321X2Q FIRST-TERMERS

<u>TASKS</u>	<u>PERCENT PERFORMING</u>
G304 POSITION OR REMOVE AIRCRAFT CHOCKS	41
G294 LAUNCH OR RECOVER AIRCRAFT	35
G291 CONNECT OR DISCONNECT PORTABLE HYDRAULIC TEST STANDS TO OR FROM AIRCRAFT	27
G293 JACK OR LEVEL AIRCRAFT	26
G314 STATIC GROUND AIRCRAFT	23
G315 TOW AIRCRAFT	23
G305 REMOVE OR INSTALL AIRCRAFT EXTERNAL FUEL TANKS	21
G319 WASH AIRCRAFT	20
G301 PERFORM SINGLE-POINT AIRCRAFT REFUELING OR DEFUELING	15
G316 TOW NONPOWERED AGE	11

TABLE 32

## 321X2 TASKS HIGHEST AND LOWEST IN TRAINING EMPHASIS

TASKS	TNG EMPH*	PERCENT 321X2 FIRST-TERMS PERFORMING	TASK DIFF**
E224 MAKE ENTRIES ON AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	6.2	65	4.7
E226 MAKE ENTRIES ON AFTO FORMS 781A (MAINTENANCE DISCREPANCY AND WORK DOCUMENT)	6.2	41	4.1
E223 MAKE ENTRIES ON AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	5.7	68	5.0
I356 PERFORM FOREIGN OBJECT INSPECTIONS	5.5	52	4.4
G296 OPERATE AEROSPACE GROUND EQUIPMENT, SUCH AS POWER UNITS, HEATERS, OR LIGHT CARTS	5.3	51	4.0
E214 MAKE ENTRIES ON AF FORMS 623 AND 623A (ON-THE-JOB TRAINING RECORD)	5.2	22	5.3
I350 INSPECT AIRCRAFT FOR GROUND SAFETY, SUCH AS PLACEMENT OF WHEEL CHOCKS OR PINS	4.9	40	3.6
I355 PERFORM AIRCRAFT ARMAMENT SAFETY INSPECTIONS	4.9	11	4.9
.	.	.	.
.	.	.	.
.	.	.	.
F280 PREPARE EQUIPMENT AUTHORIZATION LISTS	0.2	0	4.6
M529 PERFORM AC-130H WCS AN/ASN-90 INERTIAL MEASUREMENT SYSTEM IN-FLIGHT ANALYSES	0.2	1	6.9
M540 PERFORM AC-130H WCS IN-FLIGHT ANALYSES USING AN/ARC-96 TELEPRINTER SYSTEMS	0.2	0	4.2
N587 ALIGN AC-130H WCS AN/AJQ-24 JOYSTICK CONTROLLER SUBASSEMBLIES	0.2	3	5.1
O668 CALIBRATE AC-130H WCS AN/APM-366 RADAR TEST SETS	0.2	1	6.0
F283 PREPARE REQUISITIONS FOR LOCAL PURCHASE OF SUPPLY ITEMS	0.2	2	4.8
G308 REMOVE OR REPLACE AIRCRAFT BRAKE ASSEMBLIES	0.1	5	5.8
G309 REMOVE OR REPLACE AIRCRAFT WHEEL ASSEMBLIES	0.1	8	5.3

\* Average training emphasis was 1.37; standard deviation was 1.29

\*\* Average task difficulty was 5.00; standard deviation was 1.00

TABLE 33

## 321X2Q TASKS HIGHEST AND LOWEST IN TRAINING EMPHASIS

TASKS	TNG EMPH**	PERCENT 321X2Q FIRST-TERMERS PERFORMING	TASK DIFF**
X1134 ISOLATE MALFUNCTIONS USING F-4E/G WCS BUILT-IN TESTS (BIT)	7.6	76	5.6
X1156 PERFORM F-4E/G RADAR RECEIVER AND ELECTRICAL FREQUENCY CONTROL CHECKS AND ALIGNMENTS			
X1144 ISOLATE MALFUNCTIONS WITHIN F-4E/G RECEIVER LOOPS	7.1	76	5.8
X1133 ISOLATE MALFUNCTIONS USING F-4E/G OPTICAL SIGHT BIT	7.0	77	6.0
X1135 ISOLATE MALFUNCTIONS WITHIN F-4E/G AIM-7 MISSILE FIRING CIRCUITS	7.0	76	5.2
X1136 ISOLATE MALFUNCTIONS WITHIN F-4E/G ANGLE TRACK LOOPS	7.0	70	7.0
X1137 ISOLATE MALFUNCTIONS WITHIN F-4E/G ANTENNA POSITIONING LOOPS	7.0	74	6.1
X1142 ISOLATE MALFUNCTIONS WITHIN F-4E/G PULSE TRANSMITTER LOOPS	7.0	75	5.9
.	.	76	5.4
.	.	.	.
.	.	.	.
E238 PREPARE TRAINING EVALUATION FORMS	0.1	0	4.8
F252 EVALUATE REPAIR CAPABILITY LISTS	0.1	1	5.5
F280 PREPARE EQUIPMENT AUTHORIZATION LISTS	0.1	0	5.1
E184 MAINTAIN ALTERNATE MISSION EQUIPMENT FORMS	0.1	1	4.8
E188 MAINTAIN FILES OF CLASSIFIED MATERIAL OR MESSAGES	0.1	1	4.9
E207 MAKE ENTRIES ON AF FORMS 2420 (QUALITY CONTROL INSPECTION SUMMARY)	0.1	1	4.2
H323 DETERMINE LOAD LIST OR PLACARD FOR MOBILITY PALLETS	0.1	1	5.1
G290 BLEED OR SERVICE BRAKE SYSTEMS	0.0	4	4.7

\* Average training emphasis was 3.2; standard deviation was 2.27

\*\* Average task difficulty was 5.0; standard deviation was 1.80

TABLE 34

## 321X2 TASKS HIGHEST AND LOWEST IN TASK DIFFICULTY

TASKS	TASK DIFF*	PERCENT 321X2 FIRST-TERMS PERFORMING	TNG EMPH**
J380 BORESIGHT A-7D/K HEADS-UP DISPLAY SYSTEMS	8.2	0	0.0
K430 ALIGN A-7D/K AIR NAVIGATION COMPUTERS	8.2	0	0.0
K429 ALIGN A-7D/K SWEEP GENERATORS	8.1	1	0.0
O670 CALIBRATE AC-130H WCS CONTROL AND DISPLAY UNITS	7.9	1	0.0
K432 ALIGN A-7D/K LINE REPLACEABLE UNITS USING MOCK-UPS	7.9	0	0.0
P708 ISOLATE MALFUNCTIONS WITHIN F-5E/F RADAR PROCESSORS	7.7	10	0.0
P709 ISOLATE MALFUNCTIONS WITHIN F-5E/F RADAR RECEIVER TRANSMITTERS	7.7	10	0.0
M547 PERFORM OPERATIONAL CHECKS ON AC-130H WCS RELATED SYSTEM INTEGRATIONS	7.6	8	0.9
.	.	.	.
.	.	.	.
F278 PAINT FACILITIES OR EQUIPMENT	3.4	31	2.5
A2 ASSIGN SPONSORS FOR NEWLY ASSIGNED PERSONNEL	3.4	1	0.0
G318 WALK WINGS OR TAILS DURING AIRCRAFT TOWING OPERATIONS	3.4	42	2.5
I375 SAFETY WIRE WCS COMPONENTS OR FASTENERS	3.3	27	2.8
G314 STATIC GROUND AIRCRAFT	3.3	24	4.2
I346 CLEAN OR WCS AIR FILTERS OR HYDRAULIC FILTERS	3.1	13	1.0
I345 CLEAN MAINTENANCE WORK BENCHES, MOCK-UP AREAS, OR TEST STATIONS	3.1	51	2.2
G304 POSITION OR REMOVE AIRCRAFT CHOCKS	3.0	39	1.3

\* Average task difficulty was 5.00; standard deviation was 1.00

\*\* Average training emphasis was 1.37; standard deviation was 1.29

TABLE 35

## 321X2Q TASKS HIGHEST AND LOWEST IN TASK DIFFICULTY

TASKS	TASK DIFF*	PERCENT 321X2Q FIRST-TERMS PERFORMING	TNG EMPH**
D154 DEVELOP RESIDENT COURSE OR CDC CURRICULUM MATERIALS	7.2	1	0
Y1243 ISOLATE AND CORRECT MALFUNCTIONS ON F-4E/G AN/APM-420 TEST SETS	7.1	12	3.5
C134 WRITE STAFF STUDIES, SURVEYS, OR SPECIAL REPORTS, OTHER THAN TRAINING REPORTS	7.1	1	0
C96 EVALUATE BUDGET OR FINANCIAL REQUIREMENTS	7.0	1	0
X1132 ISOLATE MALFUNCTIONS TO ASSOCIATED AIRCRAFT EQUIPMENT, SUCH AS RELAY PANELS OR AIRCRAFT WIRING	7.0	67	6.0
Y1245 ISOLATE AND CORRECT MALFUNCTIONS TO F-4E/G TIC LRU-1	6.8	30	4.0
Y1220 ISOLATE AND CORRECT MALFUNCTIONS IN F-4E/G WAVEGUIDE ASSEMBLIES (LRU-19)	6.8	43	5.9
D169 PERFORM AS TRAINING ADVISOR AT STAFF LEVEL	6.8	1	0
.	.	.	.
.	.	.	.
.	.	.	.
F278 PAINT FACILITIES OR EQUIPMENT	2.6	24	1.8
G317 TRANSPORT TEST EQUIPMENT OR UNITS TO OR FROM FLIGHTLINE	2.6	37	2.8
A2 ASSIGN SPONSORS FOR NEWLY ASSIGNED PERSONNEL	2.5	2	0
G319 WASH AIRCRAFT	2.4	20	1.0
I344 CLEAN MAINTENANCE SHOP AREAS, SUCH AS FLOORS OR WALLS	2.2	81	2.7
G314 STATIC GROUND AIRCRAFT	2.1	23	3.2
G304 POSITION OR REMOVE AIRCRAFT CHOCKS	2.0	41	1.3
G318 WALK WINGS OR TAILS DURING AIRCRAFT TOWING OPERATIONS	2.0	53	2.1

\* Average task difficulty was 5.0; standard deviation was 1.00

\*\* Average training emphasis was 3.2; standard deviation was 2.27

TABLE 36

EXAMPLES OF TASKS NOT MATCHED TO 321X2 STS  
(DESCENDING ORDER OF TRAINING EMPHASIS)

TASKS	TNG* EMPH	PERCENT PERFORMING			TASK DIFF**
		FIRST- TERM	32152	32172	
I356 PERFORM FOREIGN OBJECT INSPECTIONS	5.5	52	50	51	4.4
I355 PERFORM AIRCRAFT ARMAMENT SAFETY INSPECTIONS	4.9	11	14	23	4.9
I504 REMOVE OR INSTALL A-10 PROJECTION UNITS	4.3	55	52	35	4.5
I506 REMOVE OR INSTALL A-10 STANDBY RETICLE LAMPS	4.2	45	47	30	4.5
I507 REMOVE OR INSTALL A-10 TV CONTROL UNITS	4.1	56	52	37	3.9
I508 REMOVE OR INSTALL A-10 TV MONITORS	4.1	56	52	37	3.9
I359 PERFORM SOLDERING TECHNIQUES APPLICABLE TO WCS	4.0	73	65	44	5.2
I503 REMOVE OR INSTALL A-10 HEADS-UP DISPLAY UNITS	4.0	53	49	37	3.8
I502 REMOVE OR INSTALL A-10 ELECTRONIC SYMBOL GENERATORS	3.9	36	34	33	4.0
I505 REMOVE OR INSTALL A-10 STANDBY RETICLE ADAPTER ASSEMBLIES	3.9	12	14	19	4.3
I501 REMOVE OR INSTALL A-10 COMPUTER SYMBOL GENERATORS	3.6	28	32	23	4.1
G292 INVENTORY CONSOLIDATED TOOL KITS	3.5	29	27	30	3.8
I367 REMOVE OR INSTALL WCS PANELS OR DOORS	3.2	48	41	28	3.8
I368 REMOVE OR INSTALL WCS SOLDERLESS CONNECTORS OR TERMINALS	3.2	46	42	30	4.7
I369 REMOVE OR INSTALL WCS WIRING TERMINALS OR CONNECTOR PLUGS	3.2	49	44	40	4.7
L500 RAISE OR LOWER A-10 WIND SCREENS	3.2	47	46	30	4.0
G301 PERFORM SINGLE-POINT AIRCRAFT REFUELING OR DEFUELING	3.0	21	27	19	4.6
I353 PACK OR UNPACK WCS COMPONENTS	2.8	61	55	49	3.7
I375 SAFETY WIRE WCS COMPONENTS OR FASTENERS	2.8	28	24	23	3.3
H330 PACK INDIVIDUAL MOBILITY EQUIPMENT FOR DEPLOYMENTS	2.7	17	15	14	4.0
I347 CONSTRUCT CABLES OR TEST HARNESES	2.7	16	14	19	5.9

\* Average training emphasis was 1.37; standard deviation was 1.29

\*\* Average task difficulty was 5.0; standard deviation was 1.00

TABLE 37

EVALUATION OF 3ABR32132-002 POI AGAINST  
ATCR 52-22 CRITERIA

<u>NUMBER OF TASKS THAT:</u>	<u>TOTAL</u>	<u>MATCHED TO POI</u>	
		<u>YES</u>	<u>NO</u>
QUALIFY FOR POI	58	2*	56**
DO NOT QUALIFY	732	28**	704*
TOTAL	790	30	760

\* These numbers reflect areas of alignment between  
the POI and occupational survey data

\*\* These numbers reflect areas of misalignment between  
the POI and occupational survey data



TABLE 38

EXAMPLES OF TASKS NOT MATCHED TO THE 3ABR32132-002 POI  
(DESCENDING ORDER OF TRAINING EMPHASIS)

TASKS	TNG EMPH*	PERCENT 321X2 FIRST-TERMS PERFORMING	TASK DIFF**
E224 MAKE ENTRIES ON AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	6.2	65	4.7
E226 MAKE ENTRIES ON AFTO FORMS 781A (MAINTENANCE DISCREPANCY AND WORK DOCUMENT)	6.2	41	4.1
E223 MAKE ENTRIES ON AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	5.7	68	5.0
I356 PERFORM FOREIGN OBJECT INSPECTIONS	5.5	52	4.4
I350 INSPECT AIRCRAFT FOR GROUND SAFETY SUCH AS PLACEMENT OF WHEEL CHOCKS OR PINS	4.9	40	3.6
I370 REPAIR AIRCRAFT WIRING	4.9	53	6.3
L494 PERFORM ASM-184 CHECKS OF A-10 WEAPONS DELIVERY SYSTEMS	4.6	54	4.2
F241 COMPLETE AF FORMS 2005 (ISSUE/TURN IN REQUEST)	4.5	49	4.3
L498 PERFORM OPERATIONAL BIT CHECKS OF A-10 HUD SYSTEMS	4.5	58	4.4
L499 PERFORM OPERATIONAL BIT CHECKS OF A-10 TV MONITORS	4.5	59	4.4
L504 REMOVE OR INSTALL A-10 PROJECTION UNITS	4.3	55	4.5
L506 REMOVE OR INSTALL A-10 STANDBY RETICLE LAMPS	4.2	45	4.5
L507 REMOVE OR INSTALL A-10 TV CONTROL UNITS	4.1	56	3.9
L508 REMOVE OR INSTALL A-10 TV MONITORS	4.1	56	3.9
I359 PERFORM SOLDERING TECHNIQUES APPLICABLE TO WCS	4.0	73	5.2
L490 PERFORM A-10 HUD CONTROL UNITS FUNCTIONAL CHECKS	4.0	50	4.9
L491 PERFORM A-10 PROJECTION UNITS FUNCTIONAL CHECKS	4.0	55	5.0
L496 PERFORM MINIMUM PERFORMANCE CHECKS ON A-10 HUD	4.0	58	4.4
L503 REMOVE OR INSTALL A-10 HUD CONTROL UNITS	4.0	53	3.8
L489 PERFORM A-10 ESG FUNCTIONAL CHECKS	3.9	36	5.2
L497 PERFORM MINIMUM PERFORMANCE CHECKS ON A-10 TV MONITORS	3.9	58	4.6

\* Average training emphasis was 1.37; standard deviation was 1.29

\*\* Average task difficulty was 5.0; standard deviation was 1.00

TABLE 39

EXAMPLES OF TASKS MATCHED TO 3ABR32132-002 POI  
(INVENTORY ORDER)

TASKS	TNG EMPH*	PERCENT 321X2 FIRST-TERMERS PERFORMING	TASK DIFF**
I354 PERFORM A-7D/K OR AN/ASM-395 SELF-TEST TAPE ROUTINES	1.6	15	5.7
J381 ISOLATE MALFUNCTIONS WITHIN A-7D/K FLR SYSTEMS	0	3	7.1
J388 LOAD OPERATIONAL FLIGHT PROGRAMS OR OPERATIONAL TEST PROGRAMS INTO A-7D/K NAVIGATIONAL WEAPON DELIVERY COMPUTERS	0	5	4.2
J389 PERFORM A-7D/K AN/APM-302 TEST ROUTINES	0	5	6.5
J390 PERFORM A-7D/K AN/APM-304 TEST ROUTINES	0	5	6.2
J391 PERFORM A-7D/K BEACON LOCAL OSCILLATOR CENTER FREQUENCY ADJUSTMENTS	0	0	4.6
J392 PERFORM A-7D/K HUD BUILT-IN TEST SEQUENCES	0	4	4.3
J393 PERFORM A-7D/K HUD UNITS FLAG CHECKS	0	2	3.2
J396 PERFORM A-7D/K NWDC FLAG CHECKS	0	2	3.2
J397 PERFORM A-7D/K NWDC SELF-TEST SEQUENCES	0	6	3.2
J398 PERFORM A-7D/K RADAR FAULT LOCATOR CHECKS	0	6	3.8
J400 PERFORM ASM-184/AWM-69 CHECKS OF A-7D/K WEAPONS DELIVERY SYSTEMS	0	6	4.8
J402 PERFORM OPERATIONAL CHECKS OF A-7D/K HUD SYSTEMS	0	6	4.9
J403 PERFORM OPERATIONAL CHECKS OF A-7D/K INTEGRATED AVIONICS SYSTEMS	0	3	6.2
J406 PERFORM OPERATIONAL CHECKS OF A-7D/K FLR	0	5	6.0
J417 REMOVE OR INSTALL A-7D/K NWDC	0	4	4.9
J418 REMOVE OR INSTALL A-7D/K NWDC	0	6	4.3
K458 PERFORM MINIMUM PERFORMANCE CHECKS ON A-7D/K SWEEP GENERATORS	0	3	6.3
K459 PERFORM MINIMUM PERFORMANCE CHECKS ON A-7D/K AIR NAVIGATION COMPUTERS	0	2	5.9
K460 PERFORM MINIMUM PERFORMANCE CHECKS ON A-7D/K POWER SUPPLY PROGRAMMERS	0	3	5.4
K461 PERFORM MINIMUM PERFORMANCE CHECKS ON A-7D/K MULTIPLE AIR NAVIGATION INDICATORS	0	1	5.4

\* Average training emphasis was 1.37; standard deviation was 1.29

\*\* Average task difficulty was 5.0; standard deviation was 1.00

TABLE 40

EXAMPLES OF TASKS NOT MATCHED TO THE 321X2Q STS  
(DESCENDING ORDER OF TRAINING EMPHASIS)

TASKS	TNG* EMPH	FIRST- TERM	32152	32172	TASK DIFF**
X1145 PERFORM CHECKS AND ALIGNMENTS OF F-4E/G CW TRANSMITTER FUNCTIONS USING AN/APN-383 TEST SETS	6.7	78	75	59	5.4
I370 REPAIR AIRCRAFT WIRING	6.3	67	64	50	6.5
X1146 PERFORM F-4E/G AGM-65 VIDEO WIRING AND CIRCUIT CHECKS USING AN/ASM-184 AND MAVERICK INTERFACE TEST SETS	6.1	61	59	48	5.2
I369 REMOVE OR INSTALL WCS WIRING TERMINALS OR CONNECTOR PLUGS	6.1	76	72	49	5.1
X1132 ISOLATE MALFUNCTIONS TO ASSOCIATED AIRCRAFT EQUIPMENT SUCH AS RELAY PANELS OR AIRCRAFT WIRING	6.0	67	64	54	7.0
I356 PERFORM FOREIGN OBJECT INSPECTIONS	5.8	68	68	60	4.5
I368 REMOVE OR INSTALL WCS SOLDERLESS CONNECTORS OR TERMINALS	5.7	62	60	37	4.5
X1130 ISOLATE F-4E/G WCS PRESSURIZATION MALFUNCTIONS	5.7	76	72	57	5.5
I350 INSPECT AIRCRAFT FOR GROUND SAFETY SUCH AS PLACEMENT OF WHEEL CHOCKS OR PINS	5.6	52	53	50	3.5
G296 OPERATE AEROSPACE GROUND EQUIPMENT SUCH AS POWER UNITS, HEATERS, OR LIGHT CARTS	5.4	61	59	42	3.7
I373 REPAIR RELAY PANELS	5.2	38	42	40	6.9
I372 REPAIR ELECTRICAL EQUIPMENT RACKS	5.2	47	48	42	6.7
Y1229 ISOLATE AND CORRECT MALFUNCTIONS IN F-4E/G DSCG ICU (LRU-11)	5.2	36	34	22	5.8
I343 BLEED OR PRESSURIZE WEAPON CONTROL SYSTEMS	5.1	68	67	49	3.6
I351 ISOLATE MALFUNCTIONS ON AIRCRAFT RELAY PANELS	4.8	49	52	47	7.2
I367 REMOVE OR INSTALL WCS PANELS OR DOORS	4.8	71	68	48	3.7
I363 REMOVE OR INSTALL RELAY PANELS	4.7	61	59	42	5.1
I346 CLEAN OR CHANGE WCS AIR FILTERS OR HYDRAULIC FILTERS	4.6	60	58	36	3.3
I361 PERFORM WCS CORROSION CONTROL	4.5	32	36	34	4.4
I365 REMOVE OR INSTALL WCS FUSES, LIGHT BULBS, OR TUBES	4.5	90	88	55	3.2
I366 REMOVE OR INSTALL WCS MOUNTING BRACKETS OR FIXTURES	4.3	67	67	40	4.2

\* Average training emphasis was 3.2; standard deviation was 2.27

\*\* Average task difficulty was 5.0; standard deviation was 1.00

TABLE 41  
EVALUATION OF 3ABR32132Q POI AGAINST  
AFR 52-22 CRITERIA

<u>NUMBER OF TASKS THAT:</u>	<u>TOTAL</u>	<u>MATCHED TO POI</u>	
		<u>YES</u>	<u>NO</u>
QUALIFY FOR POI	142	29*	113**
DO NOT QUALIFY	279	2**	277*
TOTAL	421	31	390

\* Reflects areas of alignment between POI and job survey data

\*\* Reflects areas of misalignment between POI and job survey data

TABLE 42

EXAMPLES OF TASKS NOT MATCHED TO 3ABR32132Q POI  
(DESCENDING ORDER OF TRAINING EMPHASIS)

TASKS	TNG EMPH*	PERCENT OF 321X2Q FIRST-TERMS PERFORMING	TASK DIFF**
X1134 ISOLATE MALFUNCTIONS USING F-4E/G WCS BUILT-IN TESTS (BIT)	7.6	76	5.6
X1144 ISOLATE MALFUNCTIONS WITHIN F-4E/G RECEIVER LOOPS	7.0	77	6.0
X1133 ISOLATE MALFUNCTIONS USING F-4E/G OPTICAL SIGHT BIT	7.0	76	5.2
X1135 ISOLATE MALFUNCTIONS WITHIN F-4E/G AIM-7 MISSILE FIRING CIRCUITS	7.0	70	7.0
X1136 ISOLATE MALFUNCTIONS WITHIN F-4E/G ANGLE TRACK LOOPS	7.0	74	6.1
X1137 ISOLATE MALFUNCTIONS WITHIN F-4E/G ANTENNA POSITIONING LOOPS	7.0	75	5.9
X1142 ISOLATE MALFUNCTIONS WITHIN F-4E/G PULSE TRANSMITTER LOOPS	7.0	76	5.4
X1140 ISOLATE MALFUNCTIONS WITHIN F-4E/G OPTICAL SIGHT SYSTEMS	6.9	76	5.5
X1139 ISOLATE MALFUNCTIONS WITHIN F-4E/G INDICATOR GROUPS	6.8	75	5.4
X1141 ISOLATE MALFUNCTIONS WITHIN F-4E/G POWER DISTRIBUTION CIRCUITS	6.8	75	5.4
X1143 ISOLATE MALFUNCTIONS WITHIN F-4E/G RANGE TRACK LOOPS	6.8	76	5.6
X1148 ISOLATE MALFUNCTIONS WITHIN F-4E/G CONTINUOUS WAVE CIRCUITS	6.8	75	5.6
I359 PERFORM SOLDERING TECHNIQUES APPLICABLE TO WCS	6.6	89	5.0
I370 REPAIR AIRCRAFT WIRING	6.3	67	6.5
Y1185 ALIGN F-4E/G MODULATOR OSCILLATORS (LRU-3)	6.1	48	6.1
I369 REMOVE OR INSTALL WCS WIRING TERMINALS OR CONNECTOR PLUGS	6.1	76	5.1
X1132 ISOLATE MALFUNCTIONS TO ASSOCIATED AIRCRAFT EQUIPMENT SUCH AS RELAY PANELS OR AIRCRAFT WIRING	6.0	67	7.0
I352 OPEN OR CLOSE RADOMES	6.0	79	3.2
X1127 BORESIGHT F-4E/G OPTICAL SIGHT SYSTEMS	6.0	70	5.2
X1129 HARMONIZE F-4E/G RADAR SUBSYSTEMS	6.0	58	6.0
Y1183 ALIGN F-4E/G DSCG INTRA-TARGET DATA INDICATORS (LRU-12, 13)	6.0	31	5.6
Y1216 BENCH CHECK F-4E/G WAVEGUIDE ASSEMBLIES (LRU-19)	6.0	32	5.6
Y1220 ISOLATE AND CORRECT MALFUNCTIONS IN F-4E/G WAVEGUIDE ASSEMBLIES (LRU-19)			
I356 PERFORM FOREIGN OBJECT INSPECTIONS	5.9	43	6.8
Y1221 ISOLATE AND CORRECT MALFUNCTIONS IN F-4E/G ANTENNAS (LRU-16)	5.8	68	4.5
	5.8	43	6.7

\* Average training emphasis was 3.2; standard deviation was 2.27

\*\* Average task difficulty was 5.0; standard deviation was 1.00

## MAJCOM COMPARISON

Differences and similarities among MAJCOMs were examined to identify MAJCOM differences that may impact training requirements.

Overall, comparison of respondents by MAJCOMs indicated that TAC, USAFE, and PACAF performed about the same jobs, with some minor differences. At the same time, ATC appeared to differ significantly from other MAJCOMs in each career ladder except the 321X2P.

### AFS 321X2 (Slick)

Table 43 shows throughout the 321X2 career ladder, there were no significant differences between TAC and USAFE, but PACAF differed slightly from TAC and USAFE. The major difference was that PACAF personnel performed fewer A-10 tasks than personnel in the other commands. The table further shows that ATC personnel performed several A-7 tasks, while few personnel in other MAJCOMs did so.

### AFS 321X2A and 321X2C

AFS 321X2A and 321X2C personnel were used in only two commands, TAC and ATC. In both of these career ladders TAC and ATC differed significantly (see Tables 44 and 45). As would be expected, ATC personnel performed several training-related tasks, while TAC personnel performed mainly maintenance tasks.

### AFS 321X2P

AFS 321X2P personnel were used in only three commands, TAC, USAFE and ATC. As Table 46 shows, airmen in TAC, ATC, and USAFE performed many of the same tasks, while USAFE personnel performed some maintenance tasks that members of the other MAJCOMs did not perform.

### AFS 321X2Q

As shown in Table 47, there were no significant differences between MAJCOMs except that ATC members performed some maintenance tasks that personnel in other MAJCOMs did not.

TABLE 43

DISCRIMINATING MAJCOM TASKS BASED ON PERCENT PERFORMING  
321X2 DUTIES

TASKS	PERCENT MEMBERS PERFORMING			
	TAC	USAFE	ATC	PACAF
<u>TAC</u>				
L507 REMOVE OR INSTALL A-10 TV CONTROL UNITS	62	50	8	40
L508 REMOVE OR INSTALL A-10 TV MONITORS	62	50	8	40
L503 REMOVE OR INSTALL A-10 HUD CONTROL UNITS	61	50	8	40
L504 REMOVE OR INSTALL A-10 PROJECTION UNITS	61	50	8	40
L506 REMOVE OR INSTALL A-10 STANDBY RETICLE LAMPS	55	46	0	40
I360 PERFORM TIME COMPLIANCE TECHNICAL ORDERS (TCTO)	52	21	17	0
<u>USAFE</u>				
L498 PERFORM OPERATIONAL BIT CHECKS OF A-10 HUD SYSTEMS	62	68	8	40
L499 PERFORM OPERATIONAL BIT CHECKS ON A-10 TV MONITORS	65	68	8	40
I365 REMOVE OR INSTALL WCS FUSES, LIGHT BULBS, OR TUBES	57	68	8	40
L497 PERFORM MINIMUM PERFORMANCE CHECKS ON A-10 TV MONITORS	62	64	58	40
F241 COMPLETE AF FORMS 2005 (ISSUE/TURN IN REQUEST)	46	54	42	20
I369 REMOVE OR INSTALL WCS WIRING TERMINALS OR CONNECTOR PLUGS	39	50	8	20
<u>ATC</u>				
J397 PERFORM A-7D/K NWDC SELF-TEST SEQUENCES	0	0	67	0
J398 PERFORM A-7D/K RADAR FAULT LOCATOR CHECKS	0	0	67	0
J400 PERFORM ASM-184/AWM-69 CHECKS OF A-7D/K WEAPONS DELIVERY SYSTEMS	0	0	67	0
J402 PERFORM OPERATIONAL CHECKS OF A-7D/K HUD SYSTEMS	0	0	67	0
J415 REMOVE OR INSTALL A-7D/K FLR SWEEP GENERATORS	0	0	67	0
J416 REMOVE OR INSTALL A-7D/K FLR TRANSMITTERS	0	0	67	0
<u>PACAF</u>				
E228 MAKE ENTRIES ON AFTO FORMS 781H (AEROSPACE VEHICLE FLIGHT STATUS AND MAINTENANCE DOCUMENT)	9	21	0	80
G297 OPERATE OR SERVICE MAINTENANCE DISPATCH VEHICLES	10	32	0	80
E215 MAKE ENTRIES ON AF FORMS 797 (JOB QUALIFICATION STANDARD CONTINUATION)	22	14	17	80
E229 MAKE ENTRIES ON AFTO FORMS 781K (AEROSPACE VEHICLE INSPECTION AND DELAYED DISCREPANCY DOCUMENT)	22	36	0	80
A8 DETERMINE WORK PRIORITIES	20	29	17	80
C120 INSPECT PERSONNEL FOR COMPLIANCE WITH MILITARY STANDARDS	21	25	33	80

TABLE 44

DISCRIMINATING MAJCOM TASKS BASED ON PERCENT PERFORMING  
321X2A TASKS

TASKS	PERCENT MEMBERS PERFORMING			
	TAC	USAFE	ATC	PACAF
<u>TAC</u>				
S864 PERFORM OPERATIONAL CHECKS ON F-106 RADAR SUBSYSTEM PRESSURIZATION LRU	72	*	21	*
S841 ISOLATE MALFUNCTIONS TO F-106 RADAR SUBSYSTEM PRESSURIZATION LRU	72	*	21	*
G310 REMOVE OR REPLACE RADOMES	67	*	7	*
G296 OPERATE AEROSPACE GROUND EQUIPMENT (AGE), SUCH AS POWER UNITS, HEATERS, OR LIGHT CARTS	64	*	21	*
I375 SAFETY WIRE WCS COMPONENTS OR FASTENERS	63	*	14	*
G318 WALK WINGS OR TAILS DURING AIRCRAFT TOWING OPERATIONS	61	*	7	*
<u>ATC</u>				
D140 CONDUCT FORMAL CLASSROOM TRAINING	1	*	57	*
D152 DEVELOP PERFORMANCE TESTS	3	*	57	*
D179 WRITE TEST QUESTIONS	3	*	57	*
D146 COUNSEL TRAINEES ON TRAINING PROGRESS	20	*	57	*
D176 SCORE TESTS	3	*	50	*
D178 WRITE OR REVISE TRAINING MATERIALS	3	*	50	*

\* No assigned personnel in this shred



TABLE 45  
DISCRIMINATING MAJCOM TASKS BASED ON PERCENT PERFORMING  
321X2C TASKS

TASKS	PERCENT MEMBERS PERFORMING			
	TAC	USAFE	ATC	PACAF
<u>TAC</u>				
F284 RESEARCH MICROFICHE FILES FOR SUPPLY REQUISITION DATA	77	*	22	*
I345 CLEAN MAINTENANCE WORK BENCHES, MOCK-UP AREAS, OR TEST STATIONS	74	*	22	*
I359 PERFORM SOLDERING TECHNIQUES APPLICABLE TO WCS	70	*	22	*
U944 CORRECT MALFUNCTIONS WITHIN F-106 MSR EVALUATORS	62	*	11	*
U958 ISOLATE MALFUNCTIONS WITHIN F-106 MSR EVALUATORS	62	*	11	*
I368 REMOVE OR INSTALL WCS SOLDERLESS CONNECTORS OR TERMINALS	60	*	11	*
<u>ATC</u>				
C89 CONDUCT INSPECTIONS	47	*	78	*
D146 COUNSEL TRAINEES ON TRAINING PROGRESS	32	*	67	*
A23 PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS	49	*	67	*
A36 PREPARE RECALL ROSTERS	15	*	56	*
B87 WRITE CORRESPONDENCE	21	*	56	*
A12 DEVELOP SELF-INSPECTION PROGRAMS	25	*	56	*

\* No assigned personnel in this shred

TABLE 46

DISCRIMINATING MAJCOM TASKS BASED ON PERCENT PERFORMING  
321X2P TASKS

TASKS	PERCENT MEMBERS PERFORMING			
	TAC	USAFE	ATC	PACAF
<u>TAC</u>				
I359 PERFORM SOLDERING TECHNIQUES APPLICABLE TO WCS	80	75	67	*
I375 SAFETY WIRE WCS COMPONENTS OR FASTENERS	75	15	24	*
F241 COMPLETE AF FORMS 2005 (ISSUE/TURN IN REQUEST)	75	63	67	*
I343 BLEED OR PRESSURIZE WEAPON CONTROL SYSTEMS	73	75	48	*
I368 REMOVE OR INSTALL WCS SOLDERLESS CONNECTORS OR TERMINALS	64	50	52	*
I376 SERVICE DESICCANTORS	60	50	33	*
<u>USAFE</u>				
F271 MAKE ENTRIES ON AF FORMS 2520 (REPAIR CYCLE CONTROL LOG)	12	88	0	*
W1123 REMOVE OR INSTALL F-4D LCA COMPONENTS	24	88	29	*
W1067 ALIGN F-4D DIGITAL SCAN CONVERTER GROUPS (DSCG)	31	88	33	*
W1084 BENCH CHECK F-4D LEAD COMPUTING AMPLIFIERS (LCA)	31	88	33	*
W1108 PERFORM PERIODIC MAINTENANCE ON F-4D AN/AWM-27 TEST BENCHES	20	88	48	*
W1111 REMOVE OR INSTALL F-4C/D AUXILIARY RADAR SET CONTROL COMPONENTS	34	88	38	*
<u>ATC</u>				
V1024 PERFORM F-4D LEAD COMPUTING OPTICAL SIGHT SYSTEMS (LCOSS) BIT	61	63	86	*
V1022 PERFORM F-4C/D RADAR BIT	64	63	86	*
V1001 HARMONIZE F-4C/D ELECTRICAL SYNCHRONIZERS USING VOLTMETERS OTHER THAN AN/APM-130A	50	63	81	*
V1004 HARMONIZE F-4C/D PULSE RECEIVER-TRANSMITTERS	54	63	81	*
V1000 HARMONIZE F-4C/D ELECTRICAL SYNCHRONIZERS USING AN/APM-130 TEST SETS	35	50	71	*
V1015 ISOLATE MALFUNCTIONS WITHIN F-4C/D RANGE TRACKING CIRCUITS	58	50	71	*

\* No assigned personnel in this shred

AD-A146 572

WEAPON CONTROL SYSTEMS CAREER LADDERS AFSC  
321X2/A/C/P/Q(U) AIR FORCE OCCUPATIONAL MEASUREMENT  
CENTER RANDOLPH AFB TX E R WALLACE AUG 84

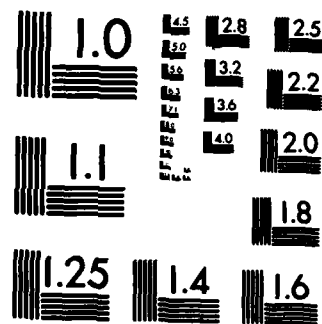
2/5

UNCLASSIFIED

F/G 5/9

NL


end



COPY RESOLUTION TEST CHART

TABLE 47

DISCRIMINATING MAJCOM TASKS BASED ON PERCENT PERFORMING  
321X2Q TASKS

TASKS	PERCENT MEMBERS PERFORMING			
	TAC	USAFE	ATC	PACAF
<u>TAC</u>				
I375 SAFETY WIRE WCS COMPONENTS OR FASTENERS	77	73	18	77
I344 CLEAN MAINTENANCE SHOP AREAS, SUCH AS FLOORS OR WALLS	74	70	46	23
X1137 ISOLATE MALFUNCTIONS WITHIN F-4E/G ANTENNA POSITIONING LOOPS	72	63	57	70
I353 PACK OR UNPACK WCS COMPONENTS	71	65	25	55
I369 REMOVE OR INSTALL WCS WIRING TERMINALS OR CONNECTOR PLUGS	71	60	21	80
I356 PERFORM FOREIGN OBJECT INSPECTIONS	70	65	21	59
<u>USAFE</u>				
I365 REMOVE OR INSTALL WCS FUSES, LIGHT BULBS, OR TUBES	88	87	43	84
I359 PERFORM SOLDERING TECHNIQUES APPLICABLE TO WCS	81	84	36	75
I374 RESEARCH TECHNICAL ORDERS TO IDENTIFY COMPONENTS OR ITEMS OF EQUIPMENT	71	74	36	68
I344 CLEAN MAINTENANCE SHOP AREAS, SUCH AS FLOORS OR WALLS	74	70	46	23
I346 CLEAN OR CHANGE WCS AIR FILTERS OR HYDRAULIC FILTERS	51	59	32	55
F241 COMPLETE AF FORMS 2005 (ISSUE/TURN IN REQUEST)	50	53	29	20
<u>ATC</u>				
D166 MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	21	28	75	27
X1157 PERFORM 4-4E/G RADAR TRANSMITTER FREQUENCY CHECKS AND ALIGNMENTS USING AN/UPM-145 TEST SETS	28	19	71	45
X1149 PERFORM F-4E/G MINIMUM DISCERNABLE SIGNAL CHECKS USING AN/UPM-145 TEST SETS	27	23	71	52
X1160 PERFORM F-4E/G RANGE TRACK CHECKS USING AN/UPM-145 TEST SETS	23	16	45	45
D172 PREPARE LESSON PLANS	1	1	64	0
D176 SCORE TESTS	1	3	61	0
<u>PACAF</u>				
I352 OPEN OR CLOSE RADOMES	73	74	11	89
I367 REMOVE OR INSTALL WCS PANELS OR DOORS	64	64	7	80
I369 REMOVE OR INSTALL WCS WIRING TERMINALS OR CONNECTOR PLUGS	71	60	21	80
I362 REMOVE OR INSTALL DESICCANTORS	65	57	14	77
X1131 ISOLATE FAULTS OF RELATED SYSTEM MALFUNCTIONS	61	52	29	75
I370 REPAIR AIRCRAFT WIRING	62	63	14	75

## CONUS VERSUS OVERSEAS ANALYSIS

Among the 32152X personnel surveyed in this study, very few 32152A, C, or P personnel were assigned overseas. Only in the 32152 and 32152Q samples were there enough people overseas to obtain meaningful data.

In the 32152 ladder, the jobs performed by CONUS versus overseas personnel were very similar, with two exceptions. First, CONUS people performed more general weapon control systems tasks than people overseas. Second, overseas people, who were more likely to work under COMO, performed significantly more cross-utilization tasks than CONUS people. Table 48 shows those tasks which best distinguish between jobs performed by CONUS and overseas personnel.

In the Q-shred, there were no important differences between jobs performed by CONUS and overseas personnel.

TABLE 48

TASKS WHICH BEST DISTINGUISH BETWEEN 32152  
CONUS AND OVERSEAS PERSONNEL

<u>TASKS</u>	<u>CONUS</u>	<u>OVERSEAS</u>	<u>DIFFERENCE</u>
I354 PERFORM A-7D/K OR AC-130H AN/ASM-395 SELF-TEST TAKE ROUTINES	17	0	+17
I352 OPEN OR CLOSE RADOMES	31	14	+17
F277 MAKE ENTRIES ON DD FORMS 1348-1 (DOD SINGLE LINE ITEM RELEASE/RECEIPT DOCUMENT)	20	5	+15
I344 CLEAN MAINTENANCE SHOP AREAS, SUCH AS FLOORS OR WALLS	82	68	+14
I375 SAFETY WIRE WCS COMPONENTS OR FASTENERS	27	14	+13
I367 REMOVE OR INSTALL WCS PANELS OR DOORS	44	32	+12
I360 PERFORM TIME COMPLIANCE TECHNICAL ORDERS (TCTO)	39	27	+12
I347 CONSTRUCT CABLES OR TEST HARNESSSES	16	5	+11
I357 PERFORM PERIODIC INSPECTIONS OF WCS TEST STATION OR TEST EQUIPMENT	47	36	+11
D167 OPERATE AUDIOVISUAL EQUIPMENT	11	0	+11
D141 CONDUCT OJT	24	14	+10
I367 SERVICE DESICCANTS	38	64	-26
L500 RAISE OR LOWER A-10 WINDSCREEN	40	68	-28
G297 OPERATE OR SERVICE MAINTENANCE DISPATCH VEHICLES	11	41	-30
G291 CONNECT OR DISCONNECT PORTABLE HYDRAULIC TEST STANDS TO OR FROM AIRCRAFT	6	36	-30
G306 REMOVE OR INSTALL AIRCRAFT PANELS	45	77	-32
G318 WALK WINGS OR TAILS DURING AIRCRAFT TOWING OPERATIONS	40	73	-33
G315 TOW AIRCRAFT	12	45	-33
G311 SERVICE AIRCRAFT HYDRAULIC SYSTEMS	7	41	-34
G316 TOW NONPOWERED AGE	7	41	-34
G301 PERFORM SINGLE-POINT AIRCRAFT REFUELING OR DEFUELING	19	54	-35
G303 POSITION NONPOWERED OR POWERED AGE TO AIRCRAFT	31	68	-37
E225 MAKE ENTRIES ON AFTO FORMS 781 (AEROSPACE VEHICLE FLIGHT DATA DOCUMENT)	13	50	-37
G294 LAUNCH OR RECOVER AIRCRAFT	26	63	-37
G300 PERFORM PREFLIGHT INSPECTIONS	12	50	-38
G304 POSITION OR REVIEW AIRCRAFT CHOCKS	34	73	-39
G314 STATIC GROUND AIRCRAFT	19	59	-40
G302 PERFORM THRU FLIGHT OR POSTFLIGHT INSPECTIONS	14	54	-40
G293 JACK OR LEVEL AIRCRAFT	22	64	-42
G309 REMOVE OR REPLACE AIRCRAFT WHEEL ASSEMBLIES	3	45	-42

### Analysis of Write-In Comments

Survey respondents are encouraged to write in comments about their jobs. In this study, 177 respondents did so. Many of these comments were from people simply adding biographical information about themselves. But, several comments were expressions of dissatisfaction from people who worked outside the mainstream of the weapons control system specialty or who worked under COMO. Examples of these write-ins include:

"I have not performed any functions in this career field since March 83 when the shop was packed up for shipment."

"I am presently working for the first-sergeant cutting grass and cleaning up around the building."

"COMO works well for APG but shatters a specialist's attitude toward his job."

"COMO puts us at a disadvantage when taking SKTs or upgrade EOC exams."

These comments are fairly typical of write-ins received in surveys of aircraft-oriented specialties. Dissatisfaction with COMO especially tends to appear in the write-in comments from such AFSSs. Yet, systematic examination of job satisfaction data has generally failed to uncover widespread dissatisfaction. Apparently, COMO may consistently produce dissatisfaction in only a small number of airmen.

Some respondents assigned to the A-10A aircraft also expressed strong feelings of dissatisfaction. These comments suggested that maintaining the A-10A system is too simple to provide a challenge to experienced airmen. Two particularly striking write-ins follow:

"I am very dissatisfied with my present job. My previous job required technical skills and ability...and gave much diversification and satisfaction--things the A-10A cannot provide. This AFSC used to have considerable prestige and 'esprit de corps' which it no longer has. I can't wait to get out and pursue a job with challenge and satisfaction."

"My extreme dissatisfaction results from under-utilization of my skills. After 13 years of experience on complex weapon systems, I have been assigned to the A-10A. I personally know several individuals who sacrificed a military career because of said dissatisfaction."

Apparently, career field managers may need to find ways of enriching the jobs of personnel assigned to maintain the A-10A system.



## COMPARISON TO PREVIOUS SURVEY

Since the career field was last surveyed in 1977, several major changes have taken place and those changes are reflected in the present study. The major changes, of course, have been the disappearance of the F-105 and the A-7 from the career field (although a very small number of personnel still maintain the A-7 system), as well as the addition of the A-10 and the F-4G to the career field. Other than these differences, however, the findings of the two surveys were quite similar. Apparently, then, career field jobs have remained stable over the years as long as the aircraft systems have continued to exist in the active inventory.

Ordinarily, this section of an occupational survey report includes a discussion of how career field job satisfaction has or has not changed over the years since the previous survey. Unfortunately, complete job satisfaction data from the 1977 survey were available for only 321X2Q personnel. But, since these personnel made up the lion's share of the career field both then and now, a comparison of their job satisfaction from the two surveys could be informative. Table 49 displays the data for this comparison and reveals at least three important findings. First, the job satisfaction of first- and second-term airmen has at least remained as good as it was in 1977, and may have actually improved somewhat. Second, airmen across-the-board are more likely to want to reenlist today than they were previously, probably as a function of the state of the civilian economy. Third, career personnel appear dramatically less well satisfied today than previously. This last finding is consistent with the relative dissatisfaction of career people noted in the TAFMS analysis and has no apparent explanation.

TABLE 49

JOB SATISFACTION COMPARISON OF 1977 AND 1984 321X2Q SAMPLES\*  
(PERCENT RESPONDING)

	<u>FIRST- ENLISTMENT</u>		<u>SECOND- ENLISTMENT</u>		<u>CAREER</u>	
	<u>1977</u>	<u>1984</u>	<u>1977</u>	<u>1984</u>	<u>1977</u>	<u>1984</u>
<u>FINDS JOB:</u>						
DULL	9	6	15	8	3	9
SO-SO	19	19	9	9	13	22
INTERESTING	72	74	66	83	84	69
<u>FEELS TALENTS USED:</u>						
LITTLE OR NOT AT ALL	21	21	23	19	14	25
FAIRLY WELL OR BETTER	79	79	77	80	86	75
<u>FEELS TRAINING USED:</u>						
LITTLE OR NOT AT ALL	20	13	18	18	22	30
FAIRLY WELL OR BETTER	80	87	82	82	78	70
<u>PLAN TO REENLIST:</u>						
NO	65	44	38	18	44**	29**
YES	35	55	62	80	56	69

\* Column totals may not equal 100 percent if items were left blank

\*\* Includes those who will retire

## IMPLICATIONS

With the continuing conversion of F-106 and F-4C and D aircraft to National Guard units, the A-10, F-5, AC-130H, and F-4E and G will soon be the major aircraft left in the career field. Under the present career field structure, this outcome will leave just two shreds: the 321X2 and the 321X2Q. Most data from this survey strongly support the continued separation of these ladders. For example, A-10 personnel (who make up most of the 321X2 ladder) perform jobs distinct from those performed by F-4E and G personnel (who make up the 321X2Q ladder). As a result, the training required by 321X2 first-termers is clearly different from that required by 321X2Q first-termers. Thus, the separate shreds ensure that the training community prepares airmen to work on the systems they will actually maintain. The separate ladders also ensure that the personnel community assigns airmen to systems they have been trained on and have experience with.

Nevertheless, job satisfaction data collected in this survey suggest some change in the classification structure of A-10 weapons control system personnel may be needed. These data showed that A-10 personnel were markedly less satisfied with their jobs than other career field members. Write-in comments, as well as discussions with A-10 personnel by phone, revealed the main cause of this dissatisfaction was boredom--the A-10 weapon control system seldom needs repair and even then the repairs are usually very simple to make. Another aspect of the strong dissatisfaction of A-10 personnel may be the fact that these mechanics have little hope of ever working on another system: they do not merge with another career ladder until the 9-skill level and only a very small percentage of 321X2 (slick) personnel work on the F-5 or AC-130H systems. Essentially, most "slick" personnel will work on the A-10 system for most of their careers.

A possible solution to the dissatisfaction of A-10 personnel would be either to enrich the A-10 job itself, or to provide airmen with a way out of the "slick" career ladder. One way to enrich the A-10 job would be to create an A-10 avionics specialty in which the same person was responsible for all the avionics on the aircraft, not just the weapon control systems. To provide airmen with a way out of the ladder probably would require some type of merger with the 321X2Q specialty, perhaps at the 7-skill level. This last solution would almost certainly create a major OJT problem since A-10 and F-4 WCS maintenance have little in common. Further, such a merger would do nothing to relieve the boredom of 3- and 5-skill level personnel. Consequently, creation of an A-10 avionics specialty would appear to be preferable as a way of improving A-10 WCS mechanics' job satisfaction.

As for initial, resident training provided by the technical training center, this study generally supported the current 3ABR32132Q Course, but raised some questions about the 3ABR32132-002 (slick) Course. Specifically, the slick course uses an A-7 trainer to prepare airmen to work primarily on the A-10 system. Analysis of specific kinds of equipment used in the course versus that used by first-termers provided some supportive, but inconclusive, evidence that the A-7 system may be generalized to that of the A-10.

Nevertheless, course managers should conduct a formal evaluation to specifically assess how well training on the A-7 system transfers to the A-10 system and use the results of that evaluation to determine the need for changes in the course.

Finally, the dramatic decline in the job satisfaction of senior weapon control systems personnel since 1977 should be a matter of concern. It does not seem likely that this change in job attitudes is due to the conversion of aircraft systems to the National Guard. First, F-106 personnel, whose aircraft was quickly being phased out of the inventory at the time this survey was taken, had the highest job satisfaction of all. Second, the relative dissatisfaction of career personnel was clearly demonstrable in the 321X2Q ladder; yet the F-4E and G systems are not currently being phased out. One explanation may be the large percentage of inexperienced junior personnel that must be supervised. Perhaps career members feel frustrated with having to do so much maintenance work themselves that really should be done by experienced subordinates. Another possibility is that the observed poor job satisfaction reflects the large proportion of career airmen who have cross-trained into the specialty (about 27 percent of all airmen with 97 or more months of service). Many of these airmen may have cross-trained involuntarily. Whatever the cause, career field managers may consider asking Air University's Leadership and Management Development Center to study the problem.

**APPENDIX A**  
**SPECIALTY JOB DESCRIPTIONS**

TABLE I  
F-5 AND A-10 FUNCTIONAL AREA  
(GRP029)

TASKS	PERCENT MEMBERS PERFORMING (N=126)
I344 CLEAN MAINTENANCE SHOP AREAS SUCH AS FLOORS OR WALLS	81
I359 PERFORM SOLDERING TECHNIQUES APPLICABLE TO WCS	68
I365 REMOVE OR INSTALL WCS FUSES, LIGHT BULBS, OR TUBES	68
L499 PERFORM OPERATIONAL BIT CHECKS ON A-10 TV MONITORS	67
L498 PERFORM OPERATIONAL BIT CHECKS OF A-10 HUD SYSTEMS	67
L497 PERFORM MINIMUM PERFORMANCE CHECKS ON A-10 TV MONITORS	66
L496 PERFORM MINIMUM PERFORMANCE CHECKS ON A-10 HUD	66
E223 MAKE ENTRIES ON AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	63
L508 REMOVE OR INSTALL A-10 TV MONITORS	63
L507 REMOVE OR INSTALL A-10 TV CONTROL UNITS	63
I362 REMOVE OR INSTALL DESICCANTORS	63
L504 REMOVE OR INSTALL A-10 PROJECTION UNITS	63
E224 MAKE ENTRIES ON AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	62
G306 REMOVE OR INSTALL AIRCRAFT PANELS	61
L503 REMOVE OR INSTALL A-10 HUD CONTROL UNITS	61
L494 PERFORM ASM-184 CHECKS OF A-10 WEAPONS DELIVERY SYSTEMS USING MISSILE INTERFACE TEST SETS (MITS)	60
I353 PACK OR UNPACK WCS COMPONENTS	60
I370 REPAIR AIRCRAFT WIRING	60
G296 OPERATE AEROSPACE GROUND EQUIPMENT (AGE) SUCH AS POWER UNITS, HEATERS, OR LIGHT CARTS	57
L493 PERFORM A-10 TV MONITOR FUNCTIONAL CHECKS	56
L492 PERFORM A-10 TV CONTROL UNIT FUNCTIONAL CHECKS	56
L491 PERFORM A-10 PROJECTION UNIT FUNCTIONAL CHECKS	56
I374 RESEARCH TECHNICAL ORDERS TO IDENTIFY COMPONENTS OR ITEMS OF EQUIPMENT	56
I356 PERFORM FOREIGN OBJECT INSPECTIONS	56
L500 RAISE OR LOWER A-10 WIND SCREENS	55
I376 SERVICE DESICCANTORS	54
L506 REMOVE OR INSTALL A-10 STANDBY RETICLE LAMPS	53
I350 INSPECT AIRCRAFT FOR GROUND SAFETY SUCH AS PLACEMENT OF WHEEL CHOCKS OR PINS	52
L490 PERFORM A-10 HUD CONTROL UNIT FUNCTIONAL CHECKS	51
I367 REMOVE OR INSTALL WCS PANELS OR DOORS	51

TABLE IA

F-5E/F PERSONNEL  
(GRP088)

TASKS	PERCENT MEMBERS PERFORMING (N=20)
P718 PERFORM OPERATIONAL CHECKS ON F-5E/F WCS RADAR RECEIVER TRANSMITTERS	100
P717 PERFORM OPERATIONAL CHECKS ON F-5E/F WCS RADAR PROCESSORS	100
P716 PERFORM OPERATIONAL CHECKS ON F-5E/F WCS RADAR INDICATORS	100
P713 PERFORM BUILT-IN TESTS (BIT) OR F-5E/F LEAD COMPUTING OPTICAL SIGHT SYSTEMS (LCOSS)	95
P715 PERFORM OPERATIONAL CHECKS ON F-5E/F WCS RADAR ANTENNAS	95
P734 REMOVE OR INSTALL F-5E/F WCS RADAR PROCESSORS	90
P736 REMOVE OR INSTALL F-5E/F WCS RADAR RECEIVER/TRANSMITTERS	90
P725 REMOVE OR INSTALL F-5E/F WCS GLC	90
P731 REMOVE OR INSTALL F-5E/F WCS RADAR ANTENNAS	90
P712 PERFORM BIT OF F-5E/F WCS RADAR SYSTEMS	85
P732 REMOVE OR INSTALL F-5E/F WCS RADAR INDICATORS	85
P719 PERFORM OPERATIONAL CHECKS ON F-5E/F WCS RADAR SET CONTROLS	85
P727 REMOVE OR INSTALL F-5E/F WCS ODU	85
I344 CLEAN MAINTENANCE SHOP AREAS SUCH AS FLOORS OR WALLS	80
P689 ALIGN F-5E/F WCS RADAR INDICATORS	80
P728 REMOVE OR INSTALL F-5E/F WCS ODU COMPONENTS	80
P726 REMOVE OR INSTALL F-5E/F WCS GLC COMPONENTS	80
P738 REMOVE OR INSTALL F-5E/F WCS RADAR SET CONTROLS	75
P709 ISOLATE MALFUNCTIONS WITHIN F-5E/F WCS RADAR RECEIVER/TRANSMITTERS	75
P708 ISOLATE MALFUNCTIONS WITHIN F-5E/F WCS RADAR PROCESSORS	75
P697 BENCH CHECK F-5E/F WCS RADAR PROCESSORS	75
P698 BENCH CHECK F-5E/F WCS RADAR RECEIVER/TRANSMITTERS	75
P691 ALIGN F-5E/F WCS RADAR RECEIVER/TRANSMITTERS	75
P690 ALIGN F-5E/F WCS RADAR PROCESSORS	75
P737 REMOVE OR INSTALL F-5E/F WCS RADAR RECEIVER/TRANSMITTER COMPONENTS	75
P707 ISOLATE MALFUNCTIONS WITHIN F-5E/F WCS RADAR INDICATORS	75
P696 BENCH CHECK F-5E/F WCS RADAR INDICATORS	75
P733 REMOVE OR INSTALL F-5E/F RADAR INDICATOR COMPONENTS	75
I353 PACK OR UNPACK WCS COMPONENTS	75
I362 REMOVE OR INSTALL DESICCANTORS	75

TABLE IA1  
F-5E/F FLIGHTLINE PERSONNEL  
(GRP273)

TASK	PERCENT MEMBERS PERFORMING (N=5)
P734 REMOVE OR INSTALL F-5E/F WCS RADAR PROCESSORS	100
P736 REMOVE OR INSTALL F-5E/F WCS RADAR RECEIVER/TRANSMITTERS	100
G306 REMOVE OR INSTALL AIRCRAFT PANELS	100
P713 PERFORM BUILT-IN TEST (BIT) OF F-5E/F LEAD COMPUTING OPTICAL SIGHT SYSTEMS (LCOSS)	100
E226 MAKE ENTRIES ON AFTO FORMS 781A (MAINTENANCE DISCREPANCY AND WORK DOCUMENT)	100
G296 OPERATE AEROSPACE GROUND EQUIPMENT (AGE) SUCH AS POWER UNITS, HEATERS, OR LIGHT CARTS	100
P732 REMOVE OR INSTALL F-5E/F WCS RADAR INDICATORS	100
P717 PERFORM OPERATIONAL CHECKS ON F-5E/F WCS RADAR PROCESSORS	100
P718 PERFORM OPERATIONAL CHECKS ON F-5E/F WCS RADAR RECEIVER/ TRANSMITTERS	100
P716 PERFORM OPERATIONAL CHECKS ON F-5E/F WCS RADAR INDICATORS	100
P731 REMOVE OR INSTALL F-5E/F WCS RADAR ANTENNAS	100
I369 REMOVE OR INSTALL WCS WIRING TERMINALS OR CONNECTOR PLUGS	100
P715 PERFORM OPERATIONAL CHECKS ON F-5E/F WCS RADAR ANTENNAS	100
P719 PERFORM OPERATIONAL CHECKS ON F-5E/F WCS RADAR SET CONTROLS	100
P725 REMOVE OR INSTALL F-5E/F WCS GLC	100
I374 RESEARCH TECHNICAL ORDERS TO IDENTIFY COMPONENTS OR ITEMS OF EQUIPMENT	100
G310 REMOVE OR REPLACE RADOMES	100
I370 REPAIR AIRCRAFT WIRING	100
P727 REMOVE OR INSTALL F-5E/F WCS ODU	100
P738 WALK WINGS OR TAILS DURING AIRCRAFT TOWING OPERATIONS	100
P712 PERFORM BIT OF F-5E/F WCS RADAR SYSTEMS	80
I367 REMOVE OR INSTALL WCS PANELS OR DOORS	80
E223 MAKE ENTRIES ON AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	80
E224 MAKE ENTRIES ON AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	80
G303 POSITION NONPOWERED OR POWERED AGE TO AIRCRAFT	80
I344 CLEAN MAINTENANCE SHOP AREAS SUCH AS FLOORS OR WALLS	80
G304 POSITION OR REMOVE AIRCRAFT CHOCKS	80
I360 PERFORM TIME COMPLIANCE TECHNICAL ORDERS (TCTO)	80
I356 PERFORM FOREIGN OBJECT INSPECTIONS	80



TABLE IA2

F-5E/F SHOP PERSONNEL  
(GRP138)

TASK	PERCENT MEMBERS PERFORMING (N=15)
P709 ISOLATE MALFUNCTIONS WITHIN F-5E/F WCS RADAR RECEIVER TRANSMITTERS	100
P708 ISOLATE MALFUNCTIONS WITHIN F-5E/F WCS RADAR PROCESSORS	100
P718 PERFORM OPERATIONAL CHECKS ON F-5E/F WCS RADAR RECEIVER TRANSMITTERS	100
P697 BENCH CHECK F-5E/F WCS RADAR PROCESSORS	100
P698 BENCH CHECK F-5E/F WCS RADAR RECEIVER TRANSMITTERS	100
P691 ALIGN F-5E/F WCS RADAR RECEIVER TRANSMITTERS	100
P690 ALIGN F-5E/F WCS RADAR PROCESSORS	100
P717 PERFORM OPERATIONAL CHECKS ON F-5E/F WCS RADAR PROCESSORS	100
P689 ALIGN F-5E/F WCS RADAR INDICATORS	100
P707 ISOLATE MALFUNCTIONS WITHIN F-5E/F WCS RADAR INDICATORS	100
P696 BENCH CHECK F-5E/F WCS RADAR INDICATORS	100
P716 PERFORM OPERATIONAL CHECKS ON F-5E/F WCS RADAR INDICATORS	100
P737 REMOVE OR INSTALL F-5E/F WCS RADAR RECEIVER/TRANSMITTER COMPONENTS	93
P735 REMOVE OR INSTALL F-5E/F WCS RADAR PROCESSOR COMPONENTS	93
P733 REMOVE OR INSTALL F-5E/F WCS RADAR INDICATOR COMPONENTS	93
P713 PERFORM BUILT-IN TESTS (BIT) OF F-5E/F LEAD COMPUTING OPTICAL SIGHT SYSTEMS (LCOSS)	93
P715 PERFORM OPERATIONAL CHECKS ON F-5E/F WCS RADAR ANTENNAS	93
P726 REMOVE OR INSTALL F-5E/F WCS GLC COMPONENTS	93
P695 BENCH CHECK F-5E/F WCS RADAR ANTENNAS	93
P706 ISOLATE MALFUNCTIONS WITHIN F-5E/F WCS RADAR ANTENNAS	93
P694 BENCH CHECK F-5E/F WCS OPTICAL DISPLAY UNITS (ODU)	93
P704 ISOLATE MALFUNCTIONS WITHIN F-5E/F WCS ODU	93
P703 ISOLATE MALFUNCTIONS WITHIN F-5E/F WCS GLC	93
P699 BENCH CHECK F-5E/F WCS RADAR SET CONTROLS	93
Q764 OPERATE F-5E INDICATOR AND PROCESSOR TEST SETS	87
Q763 OPERATE F-5E ANTENNA, TRANSMITTER, SET CONTROL TEST SETS	87
P734 REMOVE OR INSTALL F-5E/F WCS RADAR PROCESSORS	87
P736 REMOVE OR INSTALL F-5E/F WCS RADAR RECEIVER/TRANSMITTERS	87
P712 PERFORM BIT OF F-5E/F RADAR SYSTEMS	87
P728 REMOVE OR INSTALL F-5E/F WCS ODU COMPONENTS	87

TABLE IB  
A-10 PERSONNEL  
(GRP079)

TASK	PERCENT MEMBERS PERFORMING (N=86)
L508 REMOVE OR INSTALL A-10 TV MONITORS	91
L507 REMOVE OR INSTALL A-10 TV CONTROL UNITS	91
L504 REMOVE OR INSTALL A-10 PROJECTION UNITS	90
L499 PERFORM OPERATIONAL BIT CHECKS ON A-10 TV MONITORS	90
L497 PERFORM MINIMUM PERFORMANCE CHECKS ON A-10 TV MONITORS	90
L498 PERFORM OPERATIONAL BIT CHECKS OF A-10 HUD SYSTEMS	90
L496 PERFORM MINIMUM PERFORMANCE CHECKS ON A-10 HUD	88
L503 REMOVE OR INSTALL A-10 HUD CONTROL UNITS	87
I344 CLEAN MAINTENANCE SHOP AREAS SUCH AS FLOORS OR WALLS	86
L494 PERFORM ASM-184 CHECKS OF A-10 WEAPONS DELIVERY SYSTEMS USING MISSILE INTERFACE TEST SETS (MITS)	85
L492 PERFORM A-10 TV CONTROL UNIT FUNCTIONAL CHECKS	77
L500 RAISE OR LOWER A-10 WIND SCREENS	76
L493 PERFORM A-10 TV MONITOR FUNCTIONAL CHECKS	76
L491 PERFORM A-10 PROJECTION UNITS FUNCTIONAL CHECKS	74
L506 REMOVE OR INSTALL A-10 STANDBY RETICLE LAMPS	73
I365 REMOVE OR INSTALL WCS FUSES, LIGHT BULBS, OR TUBES	71
E223 MAKE ENTRIES ON AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	70
L490 PERFORM A-10 HUD CONTROL UNITS FUNCTIONAL CHECKS	69
I359 PERFORM SOLDERING TECHNIQUES APPLICABLE TO WCS	67
I362 REMOVE OR INSTALL DESICCANTORS	65
L502 REMOVE OR INSTALL A-10 ESG	64
E224 MAKE ENTRIES ON AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	64
G306 REMOVE OR INSTALL AIRCRAFT PANELS	62
L488 OPERATE A-10 TV MONITOR TEST SET SYSTEMS	58
I376 SERVICE DESICCANTORS	58
G296 OPERATE AEROSPACE GROUND EQUIPMENT (AGE) SUCH AS POWER UNITS, HEATERS, OR LIGHT CARTS	57
I356 PERFORM FOREIGN OBJECT INSPECTIONS	57
I370 REPAIR AIRCRAFT WIRING	57
I374 RESEARCH TECHNICAL ORDERS TO IDENTIFY COMPONENTS OR ITEMS OF EQUIPMENT	56
I353 PACK OR UNPACK WCS COMPONENTS	56

TABLE IB1

A-10 FLIGHTLINE PERSONNEL  
(GRP189)

TASK	PERCENT MEMBERS PERFORMING (N=40)
L494 PERFORM ASM-184 CHECKS OF A-10 WEAPONS DELIVERY SYSTEMS USING MISSILE INTERFACE TEST SETS (MITS)	100
L504 REMOVE OR INSTALL A-10 PROJECTION UNITS	100
L500 RAISE OR LOWER A-10 WIND SCREENS	100
L508 REMOVE OR INSTALL A-10 TV MONITORS	100
L498 PERFORM OPERATIONAL BIT CHECKS OF A-10 HUD SYSTEMS	100
L499 PERFORM OPERATIONAL BIT CHECKS ON A-10 TV MONITORS	100
L497 PERFORM MINIMUM PERFORMANCE CHECKS ON A-10 TV MONITORS	97
L503 REMOVE OR INSTALL A-10 HUD CONTROL UNITS	97
L496 PERFORM MINIMUM PERFORMANCE CHECKS ON A-10 HUD	95
G306 REMOVE OR INSTALL AIRCRAFT PANELS	95
I344 CLEAN MAINTENANCE SHOP AREAS SUCH AS FLOORS OR WALLS	90
G318 WALK WINGS OR TAILS DURING AIRCRAFT TOWING OPERATIONS	88
L506 REMOVE OR INSTALL A-10 STANDBY RETICLE LAMPS	85
G304 POSITION OR REMOVE AIRCRAFT CHOCKS	80
G296 OPERATE AEROSPACE GROUND EQUIPMENT (AGE) SUCH AS POWER UNITS, HEATERS, OR LIGHT CARTS	77
L502 REMOVE OR INSTALL A-10 ESG	75
I370 REPAIR AIRCRAFT WIRING	75
L492 PERFORM A-10 TV CONTROL UNIT FUNCTIONAL CHECKS	72
L490 PERFORM A-10 HUD CONTROL UNIT FUNCTIONAL CHECKS	72
I350 INSPECT AIRCRAFT FOR GROUND SAFETY SUCH AS PLACEMENT OF WHEEL CHOCKS OR PINS	72
L491 PERFORM A-10 PROJECTION UNIT FUNCTIONAL CHECKS	70
L493 PERFORM A-10 TV MONITOR FUNCTIONAL CHECKS	70
I365 REMOVE OR INSTALL WCS FUSES, LIGHT BULBS, OR TUBES	65
E223 MAKE ENTRIES ON AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	63
G303 POSITION NONPOWERED OR POWERED AGE TO AIRCRAFT	63
L489 PERFORM A-10 ESG FUNCTIONAL CHECKS	60
G317 TRANSPORT TEST EQUIPMENT OR UNITS TO OR FROM FLIGHTLINE	60
I353 PACK OR UNPACK WCS COMPONENTS	60
I359 PERFORM SOLDERING TECHNIQUES APPLICABLE TO WCS	60

**TABLE IB2**  
**A-10 CROSS UTILIZATION PERSONNEL**  
**(GRP316)**

<b>TASK</b>	<b>PERCENT MEMBERS PERFORMING (N=8)</b>
G304 POSITION OR REMOVE AIRCRAFT CHOCKS	100
G314 STATIC GROUND AIRCRAFT	100
G306 REMOVE OR INSTALL AIRCRAFT PANELS	100
G301 PERFORM SINGLE-POINT AIRCRAFT REFUELING OR DEFUELING	100
G294 LAUNCH OR RECOVER AIRCRAFT	100
G315 TOW AIRCRAFT	100
G302 PERFORM THRU FLIGHT OR POST FLIGHT INSPECTIONS	100
G317 TRANSPORT TEST EQUIPMENT OR UNITS TO OR FROM FLIGHTLINE	100
G318 WALK WINGS OR TAILS DURING AIRCRAFT TOWING OPERATIONS	100
G300 PERFORM PREFLIGHT INSPECTIONS	100
G303 POSITION NONPOWERED OR POWERED AGE TO AIRCRAFT	100
E226 MAKE ENTRIES ON AFTO FORMS 781A (MAINTENANCE DISCREPANCY AND WORK DOCUMENT)	100
G309 REMOVE OR REPLACE AIRCRAFT WHEEL ASSEMBLIES	100
G293 JACK OR LEVEL AIRCRAFT	100
G311 SERVICE AIRCRAFT HYDRAULIC SYSTEMS	100
E223 MAKE ENTRIES ON AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	100
E224 MAKE ENTRIES ON AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	100
G308 REMOVE OR REPLACE AIRCRAFT BRAKE ASSEMBLIES	100
I365 REMOVE OR INSTALL WCS FUSES, LIGHT BULBS, OR TUBES	100
G296 OPERATE AEROSPACE GROUND EQUIPMENT (AGE) SUCH AS POWER UNITS, HEATERS, OR LIGHT CARTS	88
L499 PERFORM OPERATIONAL BIT CHECKS ON A-10 TV MONITORS	88
I356 PERFORM FOREIGN OBJECT INSPECTIONS	88
G316 TOW NONPOWERED AGE	88
I350 INSPECT AIRCRAFT FOR GROUND SAFETY SUCH AS PLACEMENT OF WHEEL CHOCKS OR PINS	88
L498 PERFORM OPERATIONAL BIT CHECKS OF A-10 HUD SYSTEMS	88
E228 MAKE ENTRIES ON AFTO FORMS 781H (AEROSPACE VEHICLE FLIGHT STATUS AND MAINTENANCE DOCUMENT)	88
E229 MAKE ENTRIES ON AFTO FORMS 781K (AEROSPACE VEHICLE INSPECTION AND DELAYED DISCREPANCY DOCUMENT)	88
L497 PERFORM MINIMUM PERFORMANCE CHECKS ON A-10 TV MONITORS	88
L500 RAISE OR LOWER A-10 WIND SCREENS	88
L496 PERFORM MINIMUM PERFORMANCE CHECKS ON A-10 HUD	88

TABLE IB3

A-10 SHOP PERSONNEL  
(GRP234)

TASK	PERCENT MEMBERS PERFORMING (N=25)
L479 ALIGN A-10 TV MONITORS	100
L477 ALIGN A-10 PROJECTION UNITS (PU)	100
L481 ISOLATE AND CORRECT MALFUNCTIONS WITHIN A-10 PU	100
L486 OPERATE A-10 HUD BORESIGHT REFERENCE TOOLS AND THEODOLITES	100
L493 PERFORM A-10 TV MONITOR FUNCTIONAL CHECKS	100
L478 ALIGN A-10 TV CONTROL UNITS	100
L491 PERFORM A-10 PROJECTION UNIT FUNCTIONAL CHECKS	100
L492 PERFORM A-10 TV CONTROL UNIT FUNCTIONAL CHECKS	100
L484 ISOLATE AND CORRECT MALFUNCTIONS WITHIN A-10 TV MONITORS	96
I344 CLEAN MAINTENANCE SHOP AREAS SUCH AS FLOORS OR WALLS	96
I345 CLEAN MAINTENANCE WORK BENCHES, MOCK-UP AREAS, OR TEST STATIONS	96
L487 OPERATE A-10 HUD SYSTEM LINE REPLACEABLE UNITS (LRU) TEST SETS	96
L485 ISOLATE AND CORRECT MALFUNCTIONS WITHIN A-10 TV CONTROL UNITS	92
L488 OPERATE A-10 TV MONITOR TEST SET SYSTEMS	92
L497 PERFORM MINIMUM PERFORMANCE CHECKS ON A-10 TV MONITORS	88
I359 PERFORM SOLDERING TECHNIQUES APPLICABLE TO WCS	88
E223 MAKE ENTRIES ON AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	84
L490 PERFORM A-10 HUD CONTROL UNITS FUNCTIONAL CHECKS	84
L496 PERFORM MINIMUM PERFORMANCE CHECKS ON A-10 HUD	84
L507 REMOVE OR INSTALL A-10 TV CONTROL UNITS	84
L508 REMOVE OR INSTALL A-10 TV MONITORS	84
E224 MAKE ENTRIES ON AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	80
F241 COMPLETE AF FORMS 2005 (ISSUE/TURN IN REQUEST)	80
L499 PERFORM OPERATIONAL BIT CHECKS ON A-10 TV MONITORS	80
L498 PERFORM OPERATIONAL BIT CHECKS OF A-10 HUD SYSTEMS	80
L503 REMOVE OR INSTALL A-10 HUD CONTROL UNITS	80
L504 REMOVE OR INSTALL A-10 PROJECTION UNITS	80
I365 REMOVE OR INSTALL WCS FUSES, LIGHT BULBS, OR TUBES	76
L480 CALIBRATE A-10 HUD TESTS SETS	76
L494 PERFORM ASM-184 CHECKS OF A-10 WEAPONS DELIVERY SYSTEMS USING MISSILE INTERFACE TEST SETS (MITS)	76

TABLE II

AC-130H FIRE CONTROL MAINTENANCE PERSONNEL  
(GRP149)

TASK	PERCENT MEMBERS PERFORMING (N=230)
I375 SAFETY WIRE WCS COMPONENTS OR FASTENERS	100
I344 CLEAN MAINTENANCE SHOP AREAS SUCH AS FLOORS OR WALLS	100
M534 PERFORM AC-130H WCS OPERATIONAL TEST PROGRAM ROUTINES	100
M518 ISOLATE MALFUNCTIONS WITHIN AC-130H WCS AN/ASN-91 TACTICAL COMPUTER SYSTEMS	100
M563 REMOVE OR INSTALL AC-130H WCS AN/ASN-91 COMPUTERS	100
M566 REMOVE OR INSTALL AC-130H WCS AN/AVQ-21 FIRE CONTROL DISPLAYS (FCD)	100
M567 REMOVE OR INSTALL AC-130H WCS AN/AVQ-21 PDU	100
M553 PERFORM SELF-TEST SEQUENCES ON AC-130H WCS AN/ASN-93 COMPUTERS	100
M533 PERFORM AC-130H WCS INTERCONNECTING OR INTEGRATED WIRING CONTINUITY CHECKS	100
M545 PERFORM OPERATIONAL CHECKS ON AC-130H WCS FIRE CONTROL PANELS	100
M558 REMOVE OR INSTALL AC-130H WCS AN/APQ-150 RADAR ANTENNA RECEIVER-TRANSMITTERS	100
M509 ALIGN AC-130H WCS AN/AWG 22 (205MM) TGM	100
M583 REMOVE OR INSTALL AC-130H WCS NAVIGATION OR FIRE CONTROL PANELS	100
M548 PERFORM OPERATIONAL CHECKS ON AC-130H WCS SENSOR SELECT INTERFACE UNITS (SSIU)	100
M541 PERFORM BUILT-IN TEST EQUIPMENT (BITE) CHECKS ON AC-130H WCS AN/AVQ-21 FIRE CONTROL SYSTEM DISPLAY SETS	100
M578 REMOVE OR INSTALL AC-130H WCS AN/AVQ-21 SIGNAL DATA PROCESSORS	100
I370 REPAIR AIRCRAFT WIRING	100
I359 PERFORM SOLDERING TECHNIQUES APPLICABLE TO WCS	100
M535 PERFORM AC-130H WCS SENSOR HARMONIZATIONS	100
I352 OPEN OR CLOSE RADOMES	100
M581 REMOVE OR INSTALL AC-130H WCS CO-PILOTS DISPLAY UNITS	100
E223 MAKE ENTRIES ON AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	93
M560 REMOVE OR INSTALL AC-130H WCS AN/APQ-150 RADAR SIGNAL PROCESSORS	93
E224 MAKE ENTRIES ON AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	93
I345 CLEAN MAINTENANCE WORK BENCHES, MOCK-UP AREAS, OR TEST STATIONS	93

TABLE III  
F-106 PERSONNEL  
(GRP032)

TASK	PERCENT MEMBERS PERFORMING (N=230)
R785 ALIGN F-106 RADAR SUBSYSTEM ATTACK DISPLAYS (LRU-223, 385, 523)	94
R786 ALIGN F-106 RADAR SUBSYSTEM AUTOMATIC GAIN CONTROL (AGC) ANGLE TRACK AND HOM (LRU-020, 095)	94
R794 PERFORM F-106 OPERATIONAL CHECKS SUCH AS SHORT SYSTEM GROUND CHECKS (SSGC) AND COMPUTER ROUTINES	93
R788 ALIGN F-106 RADAR SUBSYSTEM RANGE TRACKS (LRU-095, 103)	93
R791 ALIGN F-106 RADAR SUBSYSTEM SEARCH, SUPERSEARCH AND HAND CONTROLS (LRU-083, 241, 663)	93
R782 ALIGN F-106 RADAR SUBSYSTEM ANTENNA TRACK DRIVES (LRU-041, 141, 106, 206)	93
R781 ALIGN F-106 RADAR SUBSYSTEM ANTENNA SEARCH DRIVES (LRU-241)	93
R790 ALIGN F-106 RADAR SUBSYSTEM RECEPTION AND DISPLAYS (LRU-065, 080, 195, 295)	93
R795 REMOVE OR INSTALL F-106 COMPUTER SUBSYSTEM LINE REPLACEABLE UNITS (LRU)	93
R811 SET UP AND OPERATE F-106 FAULT DETECTION TESTERS (FDT)	92
R780 ALIGN F-106 IR SUBSYSTEM IR/RADAR SWITCHINGS (LRU-663)	91
R805 REMOVE OR INSTALL F-106 RADAR SUBSYSTEM ATTACK DISPLAY LRU	91
R789 ALIGN F-106 RADAR SUBSYSTEM RAPID TUNE/PARAMP OR AUTOMATIC FREQUENCY CONTROLS (LRU-541, 841, 866)	91
R799 REMOVE OR INSTALL F-106 IR SUBSYSTEM IR/RADAR SWITCHING LRU	91
R779 ALIGN F-106 INFRARED (IR) SUBSYSTEM DRIVES (LRU-040, 441)	90
R798 REMOVE OR INSTALL F-106 IR SUBSYSTEM DRIVE LRU	90
R792 ALIGN F-106 RADAR SUBSYSTEM SWEEP GENERATIONS AND POSITIONS (LRU-195, 389)	90
R783 ALIGN F-106 RADAR SUBSYSTEM ANTENNAS (LRU-017)	90
R800 REMOVE OR INSTALL F-106 IR SUBSYSTEM RECEIVER LRU	90
R808 REMOVE OR INSTALL F-106 RADAR SUBSYSTEM RAPID TUNE/PARAMP OR AUTOMATIC FREQUENCY CONTROL LRU	90
R803 REMOVE OR INSTALL F-106 RADAR SUBSYSTEM ANTENNA DRIVE LRU	88
R801 REMOVE OR INSTALL F-106 POWER SUBSYSTEM LRU	88
R802 REMOVE OR INSTALL F-106 RADAR SUBSYSTEM ANTENNAS (LRU-017)	88
R793 ALIGN F-106 RADAR SUBSYSTEM TIMING AND TRANSMISSIONS (LRU-003, 065)	87
R784 ALIGN F-106 RADAR SUBSYSTEM ANTI-CHAFFS (LRU-506)	85
R804 REMOVE OR INSTALL F-106 RADAR SUBSYSTEM ANTI-CHAFF LRU	84
R796 REMOVE OR INSTALL F-106 FLIGHT CONTROL AND MEASUREMENT AUTOMATIC FLIGHT CONTROL SYSTEM COMPONENTS	83

**TABLE IIIA**  
**F-106 FLIGHTLINE PERSONNEL**  
**(GRP125)**

<b>TASK</b>	<b>PERCENT MEMBERS PERFORMING (N=167)</b>
S837 ISOLATE MALFUNCTIONS TO F-106 RADAR SUBSYSTEM ATTACK DISPLAY LRU	99
R788 ALIGN F-106 RADAR SUBSYSTEM RANGE TRACKS (LRU-095, 103)	99
R785 ALIGN F-106 RADAR SUBSYSTEM ATTACK DISPLAYS (LRU-223, 385, 523)	98
R786 ALIGN F-106 RADAR SUBSYSTEM AUTOMATIC GAIN CONTROL (AGC) ANGLE TRACK AND HOM (LRU-020, 095)	98
R782 ALIGN F-106 RADAR SUBSYSTEM ANTENNA TRACK DRIVES (LRU-041, 141, 106, 206)	98
R795 REMOVE OR INSTALL F-106 COMPUTER SUBSYSTEM LINE REPLACEABLE UNITS (LRU)	98
S831 ISOLATE MALFUNCTIONS TO F-106 RADAR SUBSYSTEM RECEPTION AND DISPLAY LRU	98
R781 ALIGN F-106 RADAR SUBSYSTEM ANTENNA SEARCH DRIVES (LRU-241)	98
S835 ISOLATE MALFUNCTIONS TO F-106 RADAR SUBSYSTEM ANTENNA DRIVE LRU	98
R798 REMOVE OR INSTALL F-106 IR SUBSYSTEM DRIVE LRU	98
R799 REMOVE OR INSTALL F-106 IR SUBSYSTEM IR/RADAR SWITCHING LRU	98
R790 ALIGN F-106 RADAR SUBSYSTEM RECEPTION AND DISPLAYS (LRU-065, 080, 195, 295)	98
R794 PERFORM F-106 OPERATIONAL CHECKS SUCH AS SHORT SYSTEM GROUND CHECKS (SSGC) AND COMPUTER ROUTINES	98
S834 ISOLATE MALFUNCTIONS TO F-106 RADAR SUBSYSTEM AUTOMATIC GAIN CONTROL (AGC), ANGLE TRACK, AND HOM LRU	98
S833 ISOLATE MALFUNCTIONS TO F-106 RADAR SUBSYSTEM RANGE TRACK LRU	98
R791 ALIGN F-106 RADAR SUBSYSTEM SEARCH, SUPERSEARCH AND HAND CONTROLS (LRU-083, 241, 663)	98
S832 ISOLATE MALFUNCTIONS TO F-106 RADAR SUBSYSTEM SEARCH, SUPERSEARCH, AND HAND CONTROL LRU	98
R805 REMOVE AND INSTALL F-106 RADAR SUBSYSTEM ATTACK DISPLAY LRU	97
S858 PERFORM OPERATIONAL CHECKS ON F-106 RADAR SUBSYSTEM RANGE TRACK LRU	97
S857 PERFORM OPERATIONAL CHECKS ON F-106 RADAR SUBSYSTEM SEARCH, SUPERSEARCH, AND HAND CONTROL LRU	97
S828 ISOLATE MALFUNCTIONS TO F-106 IR SUBSYSTEM LRU	97
R800 REMOVE OR INSTALL F-106 IR SUBSYSTEM RECEIVER LRU	96
S839 ISOLATE MALFUNCTIONS TO F-106 RADAR SUBSYSTEM RAPID TUNE/ PARAMP OR AUTOMATIC FREQUENCY CONTROL LRU	96



TABLE III B

F-106 SHOP PERSONNEL  
(GRP128)

TASK	PERCENT MEMBERS PERFORMING (N=54)
T877 BENCH CHECK F-106 RADAR SUBSYSTEM AUTOMATIC GAIN CONTROL (AGC), ANGLE TRACK, AND HOM LRU	98
T873 BENCH CHECK F-106 RADAR SUBSYSTEM ANTENNA DRIVE LRU	98
T880 BENCH CHECK F-106 RADAR SUBSYSTEM RANGE TRACK LRU	98
T883 BENCH CHECK F-106 RADAR SUBSYSTEM SEARCH, SUPERSEARCH, AND HAND CONTROL LRU	98
T871 BENCH CHECK F-106 INFRARED (IR) SUBSYSTEM LRU	98
T872 BENCH CHECK F-106 POWER SUBSYSTEM LRU	98
T916 ISOLATE MALFUNCTIONS WITHIN F-106 RADAR SUBSYSTEM AGC, ANGLE TRACK AND HOM LRU	96
T899 CORRECT MALFUNCTIONS WITHIN F-106 RADAR SUBSYSTEM ATTACK DISPLAY LRU	96
T917 ISOLATE MALFUNCTIONS WITHIN F-105 RADAR SUBSYSTEM ANTENNA DRIVE LRU	96
T914 ISOLATE MALFUNCTIONS WITHIN F-106 RADAR SUBSYSTEM SEARCH, SUPERSEARCH, AND HAND CONTROL LRU	96
T881 BENCH CHECK F-106 RADAR SUBSYSTEM RAPID TUNE/PARAMP OR AUTOMATIC FREQUENCY CONTROL (AFC) LRU	96
T910 ISOLATE MALFUNCTIONS WITHIN F-106 COMPUTER SUBSYSTEM LRU	96
T918 ISOLATE MALFUNCTIONS WITHIN F-106 RADAR SUBSYSTEM ANTENNAS	96
T885 BENCH CHECK F-106 RADAR SUBSYSTEM TIMING AND TRANSMISSION LRU	96
T874 BENCH CHECK F-106 RADAR SUBSYSTEM ANTENNAS	96
T896 CORRECT MALFUNCTIONS WITHIN F-106 RADAR SUBSYSTEM AGC, ANGLE TRACK AND HOM LRU	94
T897 CORRECT MALFUNCTIONS WITHIN F-106 RADAR SUBSYSTEM ANTENNA DRIVE LRU	94
T870 BENCH CHECK F-106 COMPUTER SUBSYSTEM LRU	94
T882 BENCH CHECK F-106 RADAR SUBSYSTEM RECEPTION AND DISPLAY LRU	94
T876 BENCH CHECK F-106 RADAR SUBSYSTEM ATTACK DISPLAY LRU	94
T921 ISOLATE MALFUNCTIONS WITHIN F-106 RADAR SUBSYSTEM RAPID TUNE/PARAMP OR AFC LRU	94
T891 CORRECT MALFUNCTIONS WITHIN F-106 IR SUBSYSTEM RECEIVER LRU	94
T919 ISOLATE MALFUNCTIONS WITHIN F-106 RADAR SUBSYSTEM ATTACK DISPLAY LRU	94
T895 CORRECT MALFUNCTIONS WITHIN F-106 RADAR SUBSYSTEM RANGE TRACK LRU	94
T912 ISOLATE MALFUNCTIONS WITHIN F-106 POWER SUBSYSTEM LRU	94

TABLE IIIC  
F-106 SUPERVISORS  
(GRP171)

TASK	PERCENT MEMBERS PERFORMING (N=6)
B83 SUPERVISE WEAPON CONTROL SYSTEMS TECHNICIANS (AFSC 32172A)	100
A8 DETERMINE WORK PRIORITIES	100
A43 SCHEDULE WORK ASSIGNMENTS AND PRIORITIES	100
C131 WRITE AIRMAN PERFORMANCE REPORTS	100
E214 MAKE ENTRIES ON AF FORMS 623 AND 623A (ON-THE-JOB TRAINING RECORD)	100
B69 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	100
C120 INSPECT PERSONNEL FOR COMPLIANCE WITH MILITARY STANDARDS	100
C133 WRITE RECOMMENDATIONS FOR AWARDS OR DECORATIONS	100
A41 SCHEDULE LEAVES, PASSES, OR TDY	100
A4 COORDINATE WORK ACTIVITIES WITH OTHER SECTIONS OR AGENCIES	100
C89 CONDUCT INSPECTIONS	100
E185 MAINTAIN COUNSELING FORMS	100
E226 MAKE ENTRIES ON AFTO FORMS 781A (MAINTENANCE DISCREPANCY AND WORK DOCUMENT)	100
S831 ISOLATE MALFUNCTIONS TO F-106 RADAR SUBSYSTEM RECEPTION AND DISPLAY LRU	100
S860 PERFORM OPERATIONAL CHECKS ON F-106 RADAR SUBSYSTEM ATTACK DISPLAY LRU	100
B49 COUNSEL SUBORDINATES ON PERSONAL OR MILITARY-RELATED MATTERS	100
S834 ISOLATE MALFUNCTIONS TO F-106 RADAR SUBSYSTEM AUTOMATIC GAIN CONTROL (AGC), ANGLE TRACK, AND HOM LRU	100
B71 ORIENT NEWLY ASSIGNED PERSONNEL	100
S818 CORRECT MALFUNCTIONS WITHIN F-106 SUBSYSTEMS BY REMOVING FAULTY LRU AND INSTALLING SERVICEABLE LRU	100
S865 PERFORM OPERATIONAL CHECKS ON F-106 RADAR SUBSYSTEM RECEPTION AND DISPLAY LRU	100
S833 ISOLATE MALFUNCTIONS TO F-106 RADAR SUBSYSTEM RANGE TRACK LRU	100
S854 PERFORM OPERATIONAL CHECKS ON F-106 RADAR SUBSYSTEM AGC ANGLE TRACK AND HOM LRU	100
S855 PERFORM OPERATIONAL CHECKS ON F-106 RADAR SUBSYSTEM TIMING AND TRANSMISSION LRU	100
S856 PERFORM OPERATIONAL CHECKS ON F-106 RADAR SUBSYSTEM SWEEP GENERATION AND POSITIONING LRU	100
S857 PERFORM OPERATIONAL CHECKS ON F-106 RADAR SUBSYSTEM SEARCH, SUPERSEARCH, AND HAND CONTROL LRU	100

TABLE IV  
F-4 PERSONNEL  
(GRP028)

TASK	PERCENT MEMBERS PERFORMING (N=648)
I365 REMOVE OR INSTALL WCS FUSES, LIGHT BULBS, OR TUBES	7
I359 PERFORM SOLDERING TECHNIQUES APPLICABLE TO WCS	88
I375 SAFETY WIRE WCS COMPONENTS OR FASTENERS	81
I374 RESEARCH TECHNICAL ORDERS TO IDENTIFY COMPONENTS OR ITEMS OF EQUIPMENT	77
I344 CLEAN MAINTENANCE SHOP AREAS SUCH AS FLOORS OR WALLS	77
I353 PACK OR UNPACK WCS COMPONENTS	76
I369 REMOVE OR INSTALL WCS WIRING TERMINALS OR CONNECTOR PLUGS	76
I349 EXTEND OR RETRACT A-7 OR F-4 RADAR PACKAGES	76
I352 OPEN OR CLOSE RADOMES	75
I376 SERVICE DESICCANTORS	72
I343 BLEED OR PRESSURIZE WEAPON CONTROL SYSTEMS	72
I356 PERFORM FOREIGN OBJECT INSPECTIONS	71
E223 MAKE ENTRIES ON AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	70
E224 MAKE ENTRIES ON AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	69
I362 REMOVE OR INSTALL DESICCANTORS	68
I367 REMOVE OR INSTALL WCS PANELS OR DOORS	67
X1155 PERFORM F-4E/G RADAR OPERATIONAL CHECKS USING BIT	66
X1145 PERFORM CHECKS AND ALIGNMENTS OF F-4E/G CW TRANSMITTER FUNCTIONS USING AN/APM-383 TEST SETS	66
X1156 PERFORM F-4E/G RADAR RECEIVER AND ELECTRICAL FREQUENCY CONTROL (EFC) CHECKS AND ALIGNMENTS	65
X1144 ISOLATE MALFUNCTIONS WITHIN F-4E/G RECEIVER LOOPS	65
X1142 ISOLATE MALFUNCTIONS WITHIN F-4E/G PULSE TRANSMITTER LOOPS	65
X1140 ISOLATE MALFUNCTIONS WITHIN F-4E/G OPTICAL SIGHT SYSTEMS	65
I370 REPAIR AIRCRAFT WIRING	65
X1134 ISOLATE MALFUNCTIONS USING F-4E/G WCS BIT	65
X1140 ISOLATE MALFUNCTIONS WITHIN F-4E/G OPTICAL SIGHT SYSTEMS	65
I370 REPAIR AIRCRAFT WIRING	65
X1134 ISOLATE MALFUNCTIONS USING F-4E/G WCS BIT	65
X1139 ISOLATE MALFUNCTIONS WITHIN F-4E/G INDICATOR GROUPS	65
I366 REMOVE OR INSTALL WCS MOUNTING BRACKETS OR FIXTURES	65
X1133 ISOLATE MALFUNCTIONS USING F-4E/G OPTICAL SIGHT BUILT-IN TESTS (BIT)	64
X1138 ISOLATE MALFUNCTIONS WITHIN F-4E/G CONTINUOUS WAVE (CW) CIRCUITS	64
X1137 ISOLATE MALFUNCTIONS WITHIN F-4E/G ANTENNA POSITIONING LOOPS	64
X1136 ISOLATE MALFUNCTIONS WITHIN F-4E/G ANGLE TRACK LOOPS	64

TABLE IVA

F-4C/D PERSONNEL  
(GRP061)

TASK	PERCENT MEMBERS PERFORMING (N=126)
I359 PERFORM SOLDERING TECHNIQUES APPLICABLE TO WCS	91
I365 REMOVE OR INSTALL WCS FUSES, LIGHT BULBS, OR TUBES	90
I353 PACK OR UNPACK WCS COMPONENTS	88
I344 CLEAN MAINTENANCE SHOP AREAS SUCH AS FLOORS OR WALLS	82
I343 BLEED OR PRESSURIZE WEAPON CONTROL SYSTEMS	82
F241 COMPLETE AF FORMS 2005 (ISSUE/TURN IN REQUEST)	81
I369 REMOVE OR INSTALL WCS WIRING TERMINALS OR CONNECTOR PLUGS	81
I375 SAFETY WIRE WCS COMPONENTS OR FASTENERS	81
W1060 ALIGN F-4C/D FORWARD OR AFT AZIMUTH-ELEVATION-RANGE INDICATORS	78
W1064 ALIGN F-4C/D RADAR CONTROL POWER SUPPLIES	77
W1063 ALIGN F-4C/D RADAR ANTENNAS	76
I374 RESEARCH TECHNICAL ORDERS TO IDENTIFY COMPONENTS OR ITEMS OF EQUIPMENT	76
V1022 PERFORM F-4C/D RADAR BIT	75
W1061 ALIGN F-4C/D PULSE RECEIVER-TRANSMITTERS	75
E223 MAKE ENTRIES ON AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	75
V1011 ISOLATE MALFUNCTIONS WITHIN F-4C/D BUILT-IN TEST (BIT) CIRCUITS	74
E224 MAKE ENTRIES ON AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	74
V1010 ISOLATE MALFUNCTIONS WITHIN F-4C/D ANTENNA POSITIONING CIRCUITS	74
V1024 PERFORM F-4D LEAD COMPUTING OPTICAL SIGHT SYSTEMS (LCOSS) BIT	74
W1062 ALIGN F-4C/D RADAR ANTENNA HAND CONTROLS	74
W1059 ALIGN F-4C/D ELECTRICAL SYNCHRONIZERS	73
V1003 HARMONIZE F-4C/D INDICATOR CONTROL UNITS (ICU)	73
V1014 ISOLATE MALFUNCTIONS WITHIN F-4C/D PULSE TRANSMITTING CIRCUITS	73
V1013 ISOLATE MALFUNCTIONS WITHIN F-4C/D POWER DISTRIBUTION CIRCUITS	73
I368 REMOVE OR INSTALL WCS SOLDERLESS CONNECTORS OR TERMINALS	73
V1012 ISOLATE MALFUNCTIONS WITHIN F-4C/D OPTICAL SIGHT CIRCUITS	73
V1015 ISOLATE MALFUNCTIONS WITHIN F-4C/D RANGE TRACKING CIRCUITS	72
V1017 ISOLATE MALFUNCTIONS WITHIN F-4C/D AN/APA-165 SYSTEMS	72
V1009 ISOLATE MALFUNCTIONS WITHIN F-4C/D ANGLE TRACKING CIRCUITS	72
V1016 ISOLATE MALFUNCTIONS WITHIN F-4C/D RECEIVING CIRCUITS	71

TABLE IVA1  
F-4C/D FLIGHTLINE PERSONNEL  
(GRP187)

TASK	PERCENT MEMBERS PERFORMING (N=56)
V1022 PERFORM F-4C/D RADAR BIT	100
V1041 REMOVE OR INSTALL F-4C/D ELECTRICAL SYNCHRONIZERS	100
V1038 REMOVE OR INSTALL F-4C/D CONTROL POWER SUPPLIES	100
V1021 PERFORM F-4C/D PSEUDO OR REAR SIGNAL CHECKS USING TS-2059 TEST SETS	100
V1047 REMOVE OR INSTALL F-4C/D RADAR ANTENNAS	100
V1024 PERFORM F-4D LEAD COMPUTING OPTICAL SIGHT SYSTEMS (LCOSS) BIT	100
V1045 REMOVE OR INSTALL F-4C/D INDICATOR CONTROL UNITS (ICU)	100
V1049 REMOVE OR INSTALL F-4C/D RADAR SET CONTROLS	100
V1036 REMOVE OR INSTALL F-4C/D AUXILIARY RADAR SET CONTROLS	100
V1051 REMOVE OR INSTALL F-4C/D TUNING DRIVES	100
V1011 ISOLATE MALFUNCTIONS WITHIN F-4C/D BUILT-IN TEST (BIT) CIRCUITS	98
V1003 HARMONIZE F-4C/D INDICATOR CONTROL UNITS (ICU)	98
V1010 ISOLATE MALFUNCTIONS WITHIN F-4C/D ANTENNA POSITIONING CIRCUITS	98
V1013 ISOLATE MALFUNCTIONS WITHIN F-4C/D POWER DISTRIBUTION CIRCUITS	98
V1050 REMOVE OR INSTALL F-4C/D TARGET INTERCEPT COMPUTERS (TIC)	98
V1035 REMOVE OR INSTALL F-4C/D ANTENNA HAND CONTROLS	98
V1039 REMOVE OR INSTALL F-4C/D CW RADAR TRANSMITTERS	98
V1023 PERFORM F-4C/D RADAR PRESSURIZATION CHECKS	98
V1012 ISOLATE MALFUNCTIONS WITHIN F-4C/D OPTICAL SIGHT CIRCUITS	98
V1046 REMOVE OR INSTALL F-4C/D PULSE RECEIVER-TRANSMITTERS	96
V1014 ISOLATE MALFUNCTIONS WITHIN F-4C/D PULSE TRANSMITTING CIRCUITS	96
V1015 ISOLATE MALFUNCTIONS WITHIN F-4C/D RANGE TRACKING CIRCUITS	96
V1017 ISOLATE MALFUNCTIONS WITHIN F-4D AN/APA-165 SYSTEMS	96
V1055 REMOVE OR INSTALL F-4D OPTICAL DISPLAY UNITS	96
V1016 ISOLATE MALFUNCTIONS WITHIN F-4C/D RECEIVING CIRCUITS	95
V1009 ISOLATE MALFUNCTIONS WITHIN F-4C/D ANGLE TRACKING CIRCUITS	95
V1042 REMOVE OR INSTALL F-4C/D FORWARD OR AFT AZIMUTH- ELEVATION-RANGE INDICATORS	95
V1008 ISOLATE MALFUNCTIONS WITHIN F-4C/D AIM-7 MISSILE FIRING CIRCUITS	93
V999 HARMONIZE F-4C/D CONTINUOUS WAVE (CW) MODULATORS USING AN/APM-383 TEST SETS	93
V997 BLEED AND FILL F-4C/D OS-45 COOLING SYSTEMS	93

TABLE IVA2  
F-4C/D SHOP PERSONNEL  
(GRP163)

TASK	PERCENT MEMBERS PERFORMING (N=68)
W1079 BENCH CHECK F-4C/D RADAR CONTROL POWER SUPPLIES	99
W1073 BENCH CHECK F-4C/D ELECTRICAL SYNCHRONIZERS OR SUBASSEMBLIES	97
W1092 ISOLATE MALFUNCTIONS ON F-4C/D ELECTRICAL SYNCHRONIZERS	97
W1076 BENCH CHECK F-4C/D PULSE RECEIVER-TRANSMITTERS OR SUBASSEMBLIES	97
W1064 ALIGN F-4C/D RADAR CONTROL POWER SUPPLIES	97
W1063 ALIGN F-4C/D RADAR ANTENNAS	97
W1088 ISOLATE MALFUNCTIONS ON F-4C/D CONTROL POWER SUPPLIES	97
W1118 REMOVE OR INSTALL F-4C/D RADAR CONTROL POWER SUPPLY COMPONENTS	97
W1078 BENCH CHECK F-4C/D RADAR ANTENNAS OR SUBASSEMBLIES	97
W1116 REMOVE OR INSTALL F-4C/D PULSE RECEIVER-TRANSMITTER COMPONENTS	97
W1100 ISOLATE MALFUNCTIONS ON F-4C/D RADAR ANTENNAS	97
W1075 BENCH CHECK F-4C/D INDICATOR CONTROL UNITS (ICU) OR SUBASSEMBLIES	97
W1089 ISOLATE MALFUNCTIONS ON F-4C/D CONTROL POWER SUPPLY SUBASSEMBLIES	97
W1096 ISOLATE MALFUNCTIONS ON F-4C/D ICU	97
W1094 ISOLATE MALFUNCTIONS ON F-4C/D FORWARD OR AFT AZIMUTH- ELEVATION-RANGE INDICATORS	97
W1074 BENCH CHECK F-4C/D FORWARD OR AFT AZIMUTH-ELEVATION-RANGE INDICATORS	97
W1101 ISOLATE MALFUNCTIONS ON F-4C/D RADAR SET CONTROLS	97
W1077 BENCH CHECK F-4C/D RADAR ANTENNA HAND CONTROLS	97
W1071 BENCH CHECK F-4C/D CW MODULATORS	97
W1061 ALIGN F-4C/D PULSE RECEIVER-TRANSMITTERS	96
W1113 REMOVE OR INSTALL F-4C/D ELECTRICAL SYNCHRONIZER COMPONENTS	96
I364 REMOVE OR INSTALL WCS CIRCUIT BOARD COMPONENTS, SUCH AS RESISTORS OR CAPACITORS BY SOLDERING	96
W1060 ALIGN F-4C/D FORWARD OR AFT AZIMUTH-ELEVATION-RANGE INDICATORS	96
W1065 ALIGN F-4C/D TARGET INTERCEPT COMPUTERS (TIC)	96
W1110 REMOVE OR INSTALL F-4C/D ANTENNA COMPONENTS	96
W1102 ISOLATE MALFUNCTIONS ON F-4C/D TIC	96
W1090 ISOLATE MALFUNCTIONS ON F-4C/D CW MODULATORS	96
W1062 ALIGN F-4C/D RADAR ANTENNA HAND CONTROLS	96
W1080 BENCH CHECK F-4C/D RADAR SET CONTROLS	96

TABLE IVB  
F-4E/G PERSONNEL  
(GRP039)

TASK	PERCENT MEMBERS PERFORMING (N=522)
I365 REMOVE OR INSTALL WCS FUSES, LIGHT BULBS, OR TUBES	89
I359 PERFORM SOLDERING TECHNIQUES APPLICABLE TO WCS	87
I375 SAFETY WIRE WCS COMPONENTS OR FASTENERS	81
X1145 PERFORM CHECKS AND ALIGNMENTS OF F-4E/G CW TRANSMITTER FUNCTIONS USING AN/APM-383 TEST SETS	81
X1155 PERFORM F-4E/G RADAR OPERATIONAL CHECKS USING BIT	81
I352 OPEN OR CLOSE RADOMES	80
X1156 PERFORM F-4E/G RADAR RECEIVER AND ELECTRICAL FREQUENCY CONTROL (EFC) CHECKS AND ALIGNMENTS	80
X1144 ISOLATE MALFUNCTIONS WITHIN F-4E/G RECEIVER LOOPS	79
X1142 ISOLATE MALFUNCTIONS WITHIN F-4E/G PULSE TRANSMITTER LOOPS	79
X1140 ISOLATE MALFUNCTIONS USING F-4E/G WCS BIT	79
X1134 ISOLATE MALFUNCTIONS USING F-4E/G INDICATOR GROUPS	79
X1139 ISOLATE MALFUNCTIONS WITHIN F-4E/G INDICATOR GROUPS	79
X1133 ISOLATE MALFUNCTIONS USING F-4E/G OPTICAL SIGHT BUILT-IN TESTS (BIT)	79
X1138 ISOLATE MALFUNCTIONS WITHIN F-4E/G CONTINUOUS WAVE (CW) CIRCUITS	79
X1137 ISOLATE MALFUNCTIONS WITHIN F-4E/G ANTENNA POSITIONING LOOPS	79
I349 EXTEND OR RETRACT A-7 OR F-4 RADAR PACKAGES	78
X1136 ISOLATE MALFUNCTIONS WITHIN F-4E/G ANGLE TRACK LOOPS	78
X1143 ISOLATE MALFUNCTIONS WITHIN F-4E/G RANGE TRACK LOOPS	78
X1141 ISOLATE MALFUNCTIONS WITHIN F-4E/G POWER DISTRIBUTION CIRCUITS	78
X1130 ISOLATE F-4E/g WCS PRESSURIZATION MALFUNCTIONS	78
I374 RESEARCH TECHNICAL ORDERS TO IDENTIFY COMPONENTS OR ITEMS OF EQUIPMENT	77
X1153 PERFORM F-4E/G PSEUDO SIGNAL AND READ SIGNAL DISTRIBUTION CHECKS USING TS-2059 TEST SETS	76
X1161 PERFORM F-4E/G SYNCHRONIZER ALIGNMENTS	76
X1150 PERFORM F-4E/G MISSILE FIRING FUNCTION CHECKS USING AN/AWM-88 TEST SETS	76
I344 CLEAN MAINTENANCE SHOP AREAS SUCH AS FLOORS OR WALLS	76
X1165 PERFORM OPERATIONAL CHECKS ON F-4E/G OPTICAL SIGHT SYSTEMS	75
X1172 REMOVE OR INSTALL F-4E/G RADAR LINE REPLACEABLE UNITS	75
X1166 PERFORM SELF-TEST ON F-4E/G AN/AWM-88 TEST SETS	75
I369 REMOVE OR INSTALL WCS WIRING TERMINALS OR CONNECTOR PLUGS	75

TABLE IVB1  
F-4E/G FLIGHTLINE MECHANICS  
(GRP319)

TASK	PERCENT MEMBERS PERFORMING (N=246)
X1140 ISOLATE MALFUNCTIONS WITHIN F-4E/G OPTICAL SIGHT SYSTEMS	100
X1133 ISOLATE MALFUNCTIONS USING F-4E/G OPTICAL SIGHT BUILT-IN TESTS (BIT)	99
X1139 ISOLATE MALFUNCTIONS WITHIN F-4E/G INDICATOR GROUPS	99
X1145 PERFORM CHECKS AND ALIGNMENTS OF F-4E/G CW TRANSMITTER FUNCTIONS USING AN/APM-383 TEST SETS	99
X1130 ISOLATE F-4E/G WCS PRESSURIZATION MALFUNCTIONS	99
I352 OPEN OR CLOSE RADOMES	99
X1150 PERFORM F-4E/G MISSILE FIRING FUNCTION CHECKS USING AN/AWM-88 TEST SETS	99
X1142 ISOLATE MALFUNCTIONS WITHIN F-4E/G PULSE TRANSMITTER LOOPS	99
X1137 ISOLATE MALFUNCTIONS WITHIN F-4E/G ANTENNA POSITIONING LOOPS	99
X1144 ISOLATE MALFUNCTIONS WITHIN F-4E/G RECEIVER LOOPS	98
X1136 ISOLATE MALFUNCTIONS WITHIN F-4E/G ANGLE TRACK LOOPS	98
X1153 PERFORM F-4E/G PSEUDO SIGNAL AND READ SIGNAL DISTRIBUTION CHECKS USING TS-2059 TEST SETS	98
X1138 ISOLATE MALFUNCTIONS WITHIN F-4E/G CONTINUOUS WAVE (CW) CIRCUITS	98
X1141 ISOLATE MALFUNCTIONS WITHIN F-4E/G POWER DISTRIBUTION CIRCUITS	98
X1134 ISOLATE MALFUNCTIONS USING F-4E/G WCS BIT	98
X1172 REMOVE OR INSTALL F-4E/G RADAR LINE REPLACEABLE UNITS	98
I349 EXTEND OR RETRACT A-7 OR F-4 RADAR PACKAGES	98
X1156 PERFORM F-4E/G RADAR RECEIVER AND ELECTRICAL FREQUENCY CONTROL (EFC) CHECKS AND ALIGNMENTS	98
X1155 PERFORM F-4E/G RADAR OPERATIONAL CHECKS USING BIT	98
X1143 ISOLATE MALFUNCTIONS WITHIN F-4E/G RANGE TRACK LOOPS	98
X1135 ISOLATE MALFUNCTIONS WITHIN F-4E/G AIM-7 MISSILE FIRING CIRCUITS	96
X1166 PERFORM SELF-TEST ON F-4E/G AN/AWM-88 TEST SETS	96
X1171 REMOVE OR INSTALL F-4E/G OPTICAL SIGHT COMPONENTS	96
X1170 REMOVE OR INSTALL F-4E/G NOSE WHEEL WELL DESICCANT DEHYDRATORS	96
X1175 SERVICE F-4E/G NOSE WHEEL WELL DESICCANT DEHYDRATORS	95
X1132 ISOLATE MALFUNCTIONS TO ASSOCIATED AIRCRAFT EQUIPMENT SUCH AS RELATY PANELS OR AIRCRAFT WIRING	93
X1161 PERFORM F-4E/G SYNCHRONIZER ALIGNMENTS	93



TABLE IVB2

F-4E/G FLIGHTLINE RADAR MECHANICS  
(GRP356)

TASK	PERCENT MEMBERS PERFORMING (N=18)
X1155 PERFORM F-4E/G RADAR OPERATIONAL CHECKS USING BIT	100
X1134 ISOLATE MALFUNCTIONS USING F-4E/G WCS BIT	100
X1133 ISOLATE MALFUNCTIONS USING F-4E/G OPTICAL SIGHT BUILT-IN TESTS (BIT)	100
X1172 REMOVE OR INSTALL F-4E/G RADAR LINE REPLACEABLE UNITS	100
X1153 PERFORM F-4E/G PSEUDO SIGNAL AND READ SIGNAL DISTRIBUTION CHECKS USING TS-2059 TEST SETS	100
X1142 ISOLATE MALFUNCTIONS WITHIN F-4E/G PULSE TRANSMITTER LOOPS	100
Y1188 ALIGN F-4E/G RADAR TRANSMITTERS (LRU-5)	100
X1144 ISOLATE MALFUNCTIONS WITHIN F-4E/G RECEIVER LOOPS	100
X1143 ISOLATE MALFUNCTIONS WITHIN F-4E/G RANGE TRACK LOOPS	100
X1136 ISOLATE MALFUNCTIONS WITHIN F-4E/G ANGLE TRACK LOOPS	100
X1137 ISOLATE MALFUNCTIONS WITHIN F-4E/G ANTENNA POSITIONING LOOPS	100
X1140 ISOLATE MALFUNCTIONS WITHIN F-4E/G OPTICAL SIGHT SYSTEMS	100
X1171 REMOVE OR INSTALL F-4E/G OPTICAL SIGHT COMPONENTS	100
X1145 PERFORM CHECKS AND ALGINMENTS OF F-4E/G CW TRANSMITTER FUNCTIONS USING AN/APM-383 TEST SETS	100
X1141 ISOLATE MALFUNCTIONS WITHIN F-4E/G POWER DISTRIBUTION CIRCUITS	100
Y1220 ISOLATE AND CORRECT MALFUNCTIONS IN F-4E/G WAVEGUIDE ASSEMBLIES (LRU-19)	
X1138 ISOLATE MALFUNCTIONS WITHIN F-4E/G CONTINUOUS WAVE (CW) CIRCUITS	100
X1139 ISOLATE MALFUNCTIONS WITHIN F-4E/G INDICATOR GROUPS	100
Y1226 ISOLATE AND CORRECT MALFUNCTIONS IN F-4E/G CW TRANSMITTERS (LRU-2)	100
Y1221 ISOLATE AND CORRECT MALFUNCTIONS IN F-4E/G ANTENNAS (LRU-16)	100
X1135 ISOLATE MALFUNCTIONS WITHIN F-4E/G AIM-7 MISSILE FIRING CIRCUITS	100
X1154 PERFORM F-4E/G RADAR ANTENNA CHECKS AND ALIGNMENTS	100
Y1223 ISOLATE AND CORRECT MALFUNCTIONS IN F-4E/G ANTENNA HAND CONTROLS (LRU-10)	100
X1146 PERFORM F-4E/G AGM-65 VIDEO WIRING AND CIRCUIT CHECKS USING AN/ASM-184 AND MAVERICK INTERFACE TEST SETS (MITS)	100
X1130 ISOLATE F-4E/G WCS PRESSURIZATION MALFUNCTIONS	100
X1132 ISOLATE MALFUNCTIONS TO ASSOCIATED AIRCRAFT EQUIPMENT SUCH AS RELAY PANELS OR AIRCRAFT WIRING	100

**TABLE IVB3**  
**F-4E/G RADAR CALIBRATION SHOP MECHANICS**  
**(GRP200)**

<b>TASK</b>	<b>PERCENT MEMBERS PERFORMING (N=7)</b>
X1150 PERFORM F-4E/G MISSILE FIRING FUNCTION CHECKS USING AN/AWM-88 TEST SETS	100
I349 EXTEND OR RETRACT A-7 OR F-4 RADAR PACKAGES	100
I352 OPEN OR CLOSE RADOMES	100
X1166 PERFORM SELF-TEST ON F-4E/G AN/AWM-88 TEST SETS	100
X1134 ISOLATE MALFUNCTIONS USING F-4E/G WCS BIT	100
I353 PACK OR UNPACK WCS COMPONENTS	100
X1155 PERFORM F-4E/G RADAR OPERATIONAL CHECKS USING BIT	100
X1153 PERFORM F-4E/G PSEUDO SIGNAL AND READ SIGNAL DISTRIBUTION CHECKS USING TS-2059 TEST SETS	100
X1146 PERFORM F-4E/G AGM-65 VIDEO WIRING AND CIRCUIT CHECKS USING AN/ASM-184 AND MAVERICK INTERFACE TEST SETS (MITS)	100
X1130 ISOLATE F-4E/G WCS PRESSURIZATION MALFUNCTIONS	100
I356 PERFORM FOREIGN OBJECT INSPECTIONS	86
X1145 PERFORM CHECKS AND ALIGNMENTS OF F-4E/G CW TRANSMITTER FUNCTIONS USING AN/APM-383 TEST SETS	86
X1135 ISOLATE MALFUNCTIONS WITHIN F-4E/G AIM-7 MISSILE FIRING CIRCUITS	86
X1164 PERFORM F-4E/G TUNING DRIVE CHECKS OR ALIGNMENTS USING AN/AWM-88 TEST SETS	86
X1172 REMOVE OR INSTALL F-4E/G RADAR LINE REPLACEABLE UNITS	71
E223 MAKE ENTRIES ON AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	71
Y1253 PERFORM F-4E/G RADAR CALIBRATIONS USING AN/APM-307 TEST STATIONS	71
I344 CLEAN MAINTENANCE SHOP AREAS SUCH AS FLOORS OR WALLS	71
E224 MAKE ENTRIES ON AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	71
I343 BLEED OR PRESSURIZE WEAPON CONTROL SYSTEMS	71
X1132 ISOLATE MALFUNCTIONS TO ASSOCIATED AIRCRAFT EQUIPMENT SUCH AS RELAY PANELS OR AIRCRAFT WIRING	71
I370 REPAIR AIRCRAFT WIRING	71
I357 PERFORM PERIODIC INSPECTIONS OF WCS TEST STATIONS OR TEST EQUIPMENT	71
X1127 BORESIGHT F-4E/G OPTICAL SIGHT SYSTEMS	71
X1138 ISOLATE MALFUNCTIONS WITHIN F-4E/G CONTINUOUS WAVE (CW) CIRCUITS	71
X1154 PERFORM F-4E/G RADAR ANTENNA CHECKS AND ALIGNMENTS	71
I375 SAFETY WIRE WCS COMPONENTS OR FASTENERS	57

TABLE IVB4  
F-4E/G SHOP MECHANICS  
(GRP067)

TASK	PERCENT MEMBERS PERFORMING (N=163)
Y1220 ISOLATE AND CORRECT MALFUNCTIONS IN F-4E/G WAVEGUIDE ASSEMBLIES (LRU-19)	99
Y1209 BENCH CHECK F-4E/G RADAR TRANSMITTERS (LRU-5)	99
Y1236 ISOLATE AND CORRECT MALFUNCTIONS IN F-4E/G RADAR TRANSMITTERS (LRU-5)	99
Y1199 BENCH CHECK F-4E/G CONTROL OSCILLATORS (LRU-18)	99
Y1208 BENCH CHECK F-4E/G RADAR SET CONTROLS (LRU-9)	99
Y1206 BENCH CHECK F-4E/G POWER SUPPLIES (LRU-6)	99
Y1216 BENCH CHECK F-4E/G WAVEGUIDE ASSEMBLIES (LRU-19)	98
Y1196 BENCH CHECK F-4E/G ANTENNAS (LRU-16)	98
Y1227 ISOLATE AND CORRECT MALFUNCTIONS IN F-4E/G ELECTRICAL SYNCHRONIZERS (LRU-17)	98
Y1202 BENCH CHECK F-4E/G INTRA-TARGET DATA INDICATORS (LRU-12, 13)	98
Y1233 ISOLATE AND CORRECT MALFUNCTIONS IN F-4E/G POWER SUPPLIES (LRU-6)	98
Y1195 BENCH CHECK F-4E/G ANTENNA HAND CONTROLS (LRU-10)	98
Y1190 ALIGN F-4E/G WAVEGUIDE ASSEMBLIES (LRU-19)	98
Y1221 ISOLATE AND CORRECT MALFUNCTIONS IN F-4E/G ANTENNAS (LRU-16)	98
Y1222 ISOLATE AND CORRECT MALFUNCTIONS IN F-4E/G SERVO ASSEMBLIES (LRU-7)	98
Y1179 ALIGN F-4E/G ANTENNAS (LRU-16)	98
Y1201 BENCH CHECK F-4E/G ELECTRICAL SYNCHRONIZERS (LRU-17)	98
Y1194 BENCH CHECK F-4E/G ANTENNA CONTROL SERVO ASSEMBLIES (LRU-7)	98
Y1204 BENCH CHECK F-4E/G MODULATOR OSCILLATORS (LRU-3)	98
Y1235 ISOLATE AND CORRECT MALFUNCTIONS IN F-4E/G RADAR SET CONTROLS (LRU-9)	98
Y1205 BENCH CHECK F-4E/G OPTICAL DISPLAY UNITS	98
Y1203 BENCH CHECK F-4E/G LRU-11	98
Y1188 ALIGN F-4E/G RADAR TRANSMITTERS (LRU-5)	97
Y1223 ISOLATE AND CORRECT MALFUNCTIONS IN F-4E/G ANTENNA HAND CONTROLS (LRU-10)	97
Y1200 BENCH CHECK F-4E/G CW TRANSMITTERS (LRU-2)	96
Y1213 BENCH CHECK F-4E/G STABILIZER ASSEMBLIES (LRU-4)	96
Y1224 ISOLATE AND CORRECT MALFUNCTIONS IN F-4E/G CONTROL OSCILLATOR COMPONENTS (LRU-18)	96
Y1244 ISOLATE AND CORRECT MALFUNCTIONS TO F-4E/G AIR COMBAT MANEUVERS (ACM) LRU-1	96

TABLE IVB5

F-4E/G FLIGHTLINE AND SHOP SUPERVISORS  
(GRP256)

TASK	PERCENT MEMBERS PERFORMING (N=40)
I352 OPEN OR CLOSE RADOMES	100
X1155 PERFORM F-4E/G RADAR OPERATIONAL CHECKS USING BIT	100
X1172 REMOVE OR INSTALL F-4E/G RADAR LINE REPLACEABLE UNITS	100
X1156 PERFORM F-4E/G RADAR RECEIVER AND ELECTRICAL FREQUENCY CONTROL (EFC) CHECKS AND ALIGNMENTS	100
X1134 ISOLATE MALFUNCTIONS USING F-4E/G WCS BIT	100
X1144 ISOLATE MALFUNCTIONS WITHIN F-4E/G RECEIVER LOOPS	100
X1153 PERFORM F-4E/G PSEUDO SIGNAL AND READ SIGNAL DISTRIBUTION CHECKS USING TS-2059 TEST SETS	100
X1135 ISOLATE MALFUNCTIONS WITHIN F-4E/G AIM-7 MISSILE FIRING CIRCUITS	100
X1132 ISOLATE MALFUNCTIONS TO ASSOCIATED AIRCRAFT EQUIPMENT SUCH AS RELAY PANELS OR AIRCRAFT WIRING	100
X1142 ISOLATE MALFUNCTIONS WITHIN F-4E/G PULSE TRANSMITTER LOOPS	100
I370 REPAIR AIRCRAFT WIRING	100
X1138 ISOLATE MALFUNCTIONS WITHIN F-4E/G CONTINUOUS WAVE (CW) CIRCUITS	100
X1143 ISOLATE MALFUNCTIONS WITHIN F-4E/G RANGE TRACK LOOPS	100
X1137 ISOLATE MALFUNCTIONS WITHIN F-4E/G ANTENNA POSITIONING LOOPS	100
X1136 ISOLATE MALFUNCTIONS WITHIN F-4E/G ANGLE TRACK LOOPS	100
X1165 PERFORM OPERATIONAL CHECKS ON F-4E/G OPTICAL SIGHT SYSTEMS	100
X1139 ISOLATE MALFUNCTIONS WITHIN F-4E/G INDICATOR GROUPS	100
X1133 ISOLATE MALFUNCTIONS USING F-4E/G OPTICAL SIGHT BUILT-IN TESTS (BIT)	100
X1166 PERFORM SELF-TEST ON F-4E/G AN/AWM-88 TEST SETS	100
X1140 ISOLATE MALFUNCTIONS WITHIN F-4E/G OPTICAL SIGHT SYSTEMS	100
X1141 ISOLATE MALFUNCTIONS WITHIN F-4E/G POWER DISTRIBUTION CIRCUITS	100
X1130 ISOLATE F-4E/G WCS PRESSURIZATION MALFUNCTIONS	100
X1171 REMOVE OR INSTALL F-4E/G OPTICAL SIGHT COMPONENTS	100
X1170 REMOVE OR INSTALL F-4E/G NOSE WHEEL WELL DESICCANT DEHYDRATORS	100
I356 PERFORM FOREIGN OBJECT INSPECTIONS	97
I349 EXTEND OR RETRACT A-7 OR F-4 RADAR PACKAGES	97
X1131 ISOLATE FAULTS OF RELATED SYSTEM MALFUNCTIONS	97
I367 REMOVE OR INSTALL WCS PANELS OR DOORS	97
X1168 REMOVE OR INSTALL F-4E/G AIM-7 MISSILE AUXILIARY GROUP COMPONENTS, SUCH AS UMBILICAL CABLES, OR SIGNAL HORNS	97

TABLE IVB6  
F-4E/G FLIGHTLINE AND SHOP CHIEFS  
(GRP245)

TASK	PERCENT MEMBERS PERFORMING (N=10)
X1134 ISOLATE MALFUNCTIONS USING F-4E/G WCS BIT	100
X1144 ISOLATE MALFUNCTIONS WITHIN F-4E/G RECEIVER LOOPS	100
X1136 ISOLATE MALFUNCTIONS WITHIN F-4E/G ANGLE TRACK LOOPS	100
X1135 ISOLATE MALFUNCTIONS WITHIN F-4E/G AIM-7 MISSILE FIRING CIRCUITS	100
X1142 ISOLATE MALFUNCTIONS WITHIN F-4E/G PULSE TRANSMITTER LOOPS	100
X1155 PERFORM F-4E/G RADAR OPERATIONAL CHECKS USING BIT	100
X1137 ISOLATE MALFUNCTIONS WITHIN F-4E/G ANTENNA POSITIONING LOOPS	100
X1165 PERFORM OPERATIONAL CHECKS ON F-4E/G OPTICAL SIGHT SYSTEMS	100
X1150 PERFORM F-4E/G MISSILE FIRING FUNCTION CHECKS USING AN/AWM-88 TEST SETS	100
X1139 ISOLATE MALFUNCTIONS WITHIN F-4E/G INDICATOR GROUPS	100
X1166 PERFORM SELF-TEST ON F-4E/G AN/AWM-88 TEST SETS	100
X1140 ISOLATE MALFUNCTIONS WITHIN F-4E/G OPTICAL SIGHT SYSTEMS	100
X1138 ISOLATE MALFUNCTIONS WITHIN F-4E/G CONTINUOUS WAVE (CW) CIRCUITS	100
X1143 ISOLATE MALFUNCTIONS WITHIN F-4E/G RANGE TRACK LOOPS	100
X1133 ISOLATE MALFUNCTIONS USING F-4E/G OPTICAL SIGHT BUILT-IN TESTS (BIT)	100
E214 MAKE ENTRIES ON AF FORMS 623 AND 623A (ON-THE-JOB TRAINING RECORD)	100
X1141 ISOLATE MALFUNCTIONS WITHIN F-4E/G POWER DISTRIBUTION CIRCUITS	100
X1132 ISOLATE MALFUNCTIONS TO ASSOCIATED AIRCRAFT EQUIPMENT SUCH AS RELAY PANELS OR AIRCRAFT WIRING	100
B81 SUPERVISE WEAPON CONTROL SYSTEMS MECHANICS (AFSC 32152Q)	90
X1156 PERFORM F-4E/G RADAR RECEIVER AND ELECTRICAL FREQUENCY CONTROL (EFC) CHECKS AND ALIGNMENTS	90
B75 SUPERVISE APPRENTICE WEAPON CONTROL SYSTEMS MECHANICS (AFSC 32132Q)	90
E224 MAKE ENTRIES ON AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	90
C131 WRITE AIRMAN PERFORMANCE REPORTS	90
X1153 PERFORM F-4E/G PSEUDO SIGNAL AND READ SIGNAL DISTRIBUTION CHECKS USING TS-2059 TEST SETS	90
X1145 PERFORM CHECKS AND ALIGNMENTS OF F-4E/G CW TRANSMITTER FUNCTIONS USING AN/APM-383 TEST SETS	90
X1130 ISOLATE F-4E/G WCS PRESSURIZATION MALFUNCTIONS	90

TABLE IVB7  
TECHNICAL SCHOOL INSTRUCTORS  
(GRP106)

TASK	PERCENT MEMBERS PERFORMING (N=13)
X1156 PERFORM F-4E/G RADAR RECEIVER AND ELECTRICAL FREQUENCY CONTROL (EFC) CHECKS AND ALIGNMENTS	100
D167 OPERATE AUDIOVISUAL EQUIPMENT	100
X1157 PERFORM F-4E/G RADAR TRANSMITTER FREQUENCY CHECKS AND ALIGNMENTS USING AN/UPM-145 TEST SETS	100
X1150 PERFORM F-4E/G MISSILE FIRING FUNCTION CHECKS USING AN/AWM-88 TEST SETS	100
X1147 PERFORM F-4E/G ANGLE TRACK CHECKS USING AN/UPM-141 TEST SETS	100
X1162 PERFORM F-4E/G TARGET INFORMATION RETRIEVAL SYSTEMS (TIRS) GROUND CHECKS	100
X1153 PERFORM F-4E/G PSEUDO SIGNAL AND READ SIGNAL DISTRIBUTION CHECKS USING TS-2059 TEST SETS	100
D140 CONDUCT FORMAL CLASSROOM TRAINING	92
D172 PREPARE LESSON PLANS	92
X1155 PERFORM F-4E/G RADAR OPERATIONAL CHECKS USING BIT	92
D176 SCORE TESTS	92
D168 OPERATE SIMULATOR EQUIPMENT	92
X1161 PERFORM F-4E/G SYNCHRONIZER ALIGNMENTS	92
X1145 PERFORM CHECKS AND ALIGNMENTS OF F-4E/G CW TRANSMITTER FUNCTIONS USING AN/APM-383 TEST SETS	92
D166 MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	85
D135 ADMINISTER TESTS	85
X1154 PERFORM F-4E/G RADAR ANTENNA CHECKS AND ALIGNMENTS	85
X1160 PERFORM F-4E/G RANGE TRACK CHECKS USING AN/UPM-145 TEST SETS	85
X1146 PERFORM F-4E/G AGM-65 VIDEO WIRING AND CIRCUIT CHECKS USING AN/ASM-184 AND MAVERICK INTERFACE TEST SETS (MITS)	85
X1159 PERFORM F-4E/G RANGE TRACK CHECKS USING AN/UPM-141 TEST SETS	85
X1149 PERFORM F-E/G MINIMUM DISCERNABLE SIGNAL CHECKS USING AN/UPM-145 TEST SETS	85
X1166 PERFORM SELF-TEST ON F-4E/G OPTICAL SIGHT SYSTEMS	85
X1165 PERFORM OPERATIONAL CHECKS ON F-4E/G OPTICAL SIGHT SYSTEMS	85
X1148 PERFORM F-4E/G MINIMUM DISCERNABLE SIGNAL CHECKS USING AN/UPM-141 TEST SETS	85
Y1259 RETRIEVE TACTICAL INFORMATION STORED IN TIRS	85
X1158 PERFORM F-4E/G RADAR TRANSMITTER FREQUENCY CHECKS AND ALIGNMENTS USING AN/UPM-141 TEST SETS	77

TABLE V  
SUPPORT PERSONNEL  
(GRP011)

TASK	PERCENT MEMBERS PERFORMING (N=17)
F259 LOG TURN-IN OF SUPPLIES AND EQUIPMENT	71
F241 COMPLETE AF FORMS 2005 (ISSUE/TURN IN REQUEST)	71
F284 RESEARCH MICROFICHE FILES FOR SUPPLY REQUISITION DATA	71
F261 MAINTAIN CONSOLIDATED TOOL KITS	59
F258 ISSUE SUPPLIES AND EQUIPMENT	59
F268 MAKE ENTRIES ON AF FORMS 1297 (TEMPORARY ISSUE RECEIPT)	53
F257 INVENTORY EQUIPMENT, TOOLS, OR SUPPLIES OTHER THAN COMPOSITE TOOL KITS (CTK)	53
F244 COORDINATE WITH BASE SUPPLY ON OBTAINING PARTS	53
G292 INVENTORY CONSOLIDATED TOOL KITS (CTK)	47
F277 MAKE ENTRIES ON DD FORMS 1348-1 (DOD SINGLE LINE ITEM RELEASE/RECEIPT DOCUMENT)	41
E224 MAKE ENTRIES ON AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	41
F270 MAKE ENTRIES ON AF FORMS 2413 (SUPPLY CONTROL LOG)	35
E223 MAKE ENTRIES ON AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	35
F271 MAKE ENTRIES ON AF FORMS 2520 (REPAIR CYCLE CONTROL LOG)	29
F260 MAINTAIN BENCHSTOCK LEVELS	29
F239 ATTACH OR ANNOTATE EQUIPMENT STATUS LABELS OR TAGS, SUCH AS DD FORMS 1574 (SERVICEABLE TAG-MATERIEL)	29
E182 COMPLETE MATERIEL DEFICIENCY REPORTS	29
F263 MAINTAIN DUE-IN-FROM-MAINTENANCE LISTS (R26/869-87 OR T-21)	24
F287 REVIEW SUPPLY DAILY DOCUMENT REGISTERS (D04/804-11)	24
I344 CLEAN MAINTENANCE SHOP AREAS SUCH AS FLOORS OR WALLS	24
F286 REVIEW PRIORITY MONITOR REPORTS (D18/820-50)	24
F240 CERTIFY STATUS OR REPARABLE, SERVICEABLE, OR CONDEMNED PARTS	24
E193 MAINTAIN PRECISION MEASUREMENT EQUIPMENT (PME) CALIBRATION SCHEDULES	24
C131 WRITE AIRMAN PERFORMANCE REPORTS	24
F247 ESTABLISH REQUIREMENTS FOR EQUIPMENT OR TOOLS	24
F242 COMPLETE DD FORMS 1348-6 (NON-NSN REQUISITION (MANUAL))	24
F289 SCHEDULE SUPPORT EQUIPMENT FOR CALIBRATION	24
A23 PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS	24
A8 DETERMINE WORK PRIORITIES	24
H330 PACK INDIVIDUAL MOBILITY EQUIPMENT FOR DEPLOYMENTS	24

TABLE VA  
COMPOSITE TOOL KIT MONITORS  
(GRP172)

TASK	PERCENT MEMBERS PERFORMING (N=7)
F259 LOG TURN-IN OF SUPPLIES AND EQUIPMENT	100
F261 MAINTAIN CONSOLIDATED TOOL KITS	100
F258 ISSUE SUPPLIES AND EQUIPMENT	86
F284 RESEARCH MICROFICHE FILES FOR SUPPLY REQUISITION DATA	71
F268 MAKE ENTRIES ON AF FORMS 1297 (TEMPORARY ISSUE RECEIPT)	57
G292 INVENTORY CONSOLIDATED TOOL KITS (CTK)	57
F257 INVENTORY EQUIPMENT, TOOLS, OR SUPPLIES OTHER THAN COMPOSITE TOOL KITS (CTK)	57
F241 COMPLETE AF FORMS 2005 (ISSUE/TURN IN REQUEST)	57
F262 MAINTAIN DAILY STATUS RECORDS ON SUPPORT EQUIPMENT	43
F260 MAINTAIN BENCHSTOCK LEVELS	43
F244 COORDINATE WITH BASE SUPPLY ON OBTAINING PARTS	43
F278 PAINT FACILITIES OR EQUIPMENT	29
I344 CLEAN MAINTENANCE SHOP AREAS SUCH AS FLOORS OR WALLS	29
F247 ESTABLISH REQUIREMENTS FOR EQUIPMENT OR TOOLS	29
B49 COUNSEL SUBORDINATES ON PERSONAL OR MILITARY-RELATED MATTERS	14
C131 WRITE AIRMAN PERFORMANCE REPORTS	14
C89 CONDUCT INSPECTIONS	14
E195 MAINTAIN PUBLICATION LIBRARIES	14
F243 COMPLETE DD FORMS 2090 (GPLD (GOVERNMENT PROPERTY LOST OR DAMAGED) SURVEY CERTIFICATE)	14
I356 PERFORM FOREIGN OBJECT INSPECTIONS	14
F270 MAKE ENTRIES ON AF FORMS 2413 (SUPPLY CONTROL LOG)	14
E224 MAKE ENTRIES ON AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	14
F249 ESTIMATE OR VALIDATE BENCH STOCK REQUIREMENTS	14
F256 IDENTIFY SUPPLY PROBLEMS	14
F264 MAINTAIN INSPECTION CARDS ON ITEMS REQUIRING PERIODIC INSPECTIONS	14
H328 INSPECT AND PREPARE MOBILITY CONTAINERS AND PALLETS	14
H330 PACK INDIVIDUAL MOBILITY EQUIPMENT FOR DEPLOYMENTS	14
H333 PLACE LOAD LIST OR PLACARD ON MOBILITY PALLETS	14
A23 PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS	14
A41 SCHEDULE LEAVES, PASSES, OR TDY	14



TABLE VB  
DUE-IN-FOR-MAINTENANCE MONITORS  
(GRP080)

TASK	PERCENT MEMBERS PERFORMING (N=5)
F277 MAKE ENTRIES ON DD FORMS 1348-1 (DOD SINGLE LINE ITEM RELEASE/RECEIPT DOCUMENT)	100
F244 COORDINATE WITH BASE SUPPLY ON OBTAINING PARTS	100
F263 MAINTAIN DUE-IN-FROM-MAINTENANCE LISTS (R26/869-87 OR T-21)	80
F287 REVIEW SUPPLY DAILY DOCUMENT REGISTERS (D04/804-11)	80
F271 MAKE ENTRIES ON AF FORMS 2520 (REPAIR CYCLE CONTROL LOG)	80
F259 LOG TURN-IN OF SUPPLIES AND EQUIPMENT	80
F284 RESEARCH MICROFICHE FILES FOR SUPPLY REQUISITION DATA	80
F241 COMPLETE AF FORMS 2005 (ISSUE/TURN IN REQUEST)	80
E182 COMPLETE MATERIEL DEFICIENCY REPORTS	80
E223 MAKE ENTRIES ON AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	80
F270 MAKE ENTRIES ON AF FORMS 2413 (SUPPLY CONTROL LOG)	60
F286 REVIEW PRIORITY MONITOR REPORTS (D18/820-50)	60
F239 ATTACH OR ANNOTATE EQUIPMENT STATUS LABELS OR TAGS, SUCH AS DD FORMS 1574 (SERVICEABLE TAG-MATERIEL)	60
F240 CERTIFY STATUS OF REPARABLE, SERVICEABLE, OR CONDEMNED PARTS	60
F242 COMPLETE DD FORMS 2348-6 (NON-NSN REQUISITION (MANUAL))	60
A23 PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS	60
A8 DETERMINE WORK PRIORITIES	60
E224 MAKE ENTRIES ON AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	60
C131 WRITE AIRMAN PERFORMANCE REPORTS	60
E214 MAKE ENTRIES ON AF FORMS 623 AND 623A (ON-THE-JOB TRAINING RECORD)	60
F256 IDENTIFY SUPPLY PROBLEMS	40
F258 ISSUE SUPPLIES AND EQUIPMENT	40
A27 PLAN OR PREPARE BRIEFINGS	40
F279 PREPARE DOCUMENTATION TO TURN IN SURPLUS PROPERTY	40
F254 EVALUATE SUPPLY PROBLEMS	40
F273 MAKE ENTRIES ON AF FORMS 451 (REQUEST FOR PACKAGING SERVICE)	40
I353 PACK OR UNPACK WCS COMPONENTS	40
F257 INVENTORY EQUIPMENT, TOOLS, OR SUPPLIES OTHER THAN COMPOSITE TOOL KITS (CTK)	40
F268 MAKE ENTRIES ON AF FORMS 1297 (TEMPORARY ISSUE RECEIPT)	40
C128 REVIEW MAINTENANCE DATA COLLECTION FORMS	40

**TABLE VI**  
**TECHNICAL TRAINING PERSONNEL**  
**(GRP024)**

<b>TASK</b>	<b>PERCENT MEMBERS PERFORMING (N=18)</b>
D140 CONDUCT FORMAL CLASSROOM TRAINING	72
D135 ADMINISTER TESTS	72
D176 SCORE TESTS	72
D172 PREPARE LESSON PLANS	67
D167 OPERATE AUDIOVISUAL EQUIPMENT	61
D146 COUNSEL TRAINEES ON TRAINING PROGRESS	61
D144 CONDUCT SECURITY TRAINING	61
D166 MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	56
D143 CONDUCT SAFETY TRAINING	56
D142 CONDUCT RESIDENT COURSE CLASSROOM TRAINING	50
I344 CLEAN MAINTENANCE SHOP AREAS SUCH AS FLOORS OR WALLS	50
I365 REMOVE OR INSTALL WCS FUSES, LIGHT BULBS, OR TUBES	50
I345 CLEAN MAINTENANCE WORK BENCHES, MOCK-UP AREAS, OR TEST STATIONS	44
J398 PERFORM A-7D/K RADAR FAULT LOCATOR CHECKS	44
I374 RESEARCH TECHNICAL ORDERS TO IDENTIFY COMPONENTS OR ITEMS OF EQUIPMENT	44
J397 PERFORM A-7D/K NWDC SELF-TEST SEQUENCES	44
J402 PERFORM OPERATIONAL CHECKS OF A-7D/K HUD SYSTEMS	44
E221 MAKE ENTRIES ON AFTO FORMS 244 AND 245 (SYSTEM/EQUIPMENT STATUS RECORD)	44
J418 REMOVE OR INSTALL A-7D/K NWDC	44
J415 REMOVE OR INSTALL A-7D/K FLR SWEEP GENERATORS	44
J400 PERFORM ASM-184/AWM-69 CHECKS OF A-7D/K WEAPONS DELIVERY SYSTEMS	44
J419 REMOVE OR INSTALL A-7D/K PILOT DISPLAY UNITS (PDU)	44
J416 REMOVE OR INSTALL A-7D/K FLR TRANSMITTERS	44
J421 REMOVE OR INSTALL A-7D/K SIGNAL DATA PROCESSORS (SDP)	44
C120 INSPECT PERSONNEL FOR COMPLIANCE WITH MILITARY STANDARDS	39
D179 WRITE TEST QUESTIONS	39
J406 PERFORM OPERATIONAL CHECKS ON A-7D/K FLR	39
K454 LOAD TAPES IN TAPE READER ON A-7D/K TEST STATIONS	39
J389 PERFORM A-7D/K AN/APM-302 TEST ROUTINES	39
J390 PERFORM A-7D/K AN/APM-304 TEST ROUTINES	39

TABLE VIA  
A-7 INSTRUCTORS AND MECHANICS  
(GRP119)

TASK	PERCENT MEMBERS PERFORMING (N=8)
J398 PERFORM A-7D/K RADAR FAULT LOCATOR CHECKS	100
J397 PERFORM A-7D/K NWDC SELF-TEST SEQUENCES	100
J402 PERFORM OPERATIONAL CHECKS OF A-7D/K HUD SYSTEMS	100
J418 REMOVE OR INSTALL A-7D/K NWDC	100
J415 REMOVE OR INSTALL A-7D/K FLR SWEEP GENERATORS	100
J400 PERFORM ASM-184/AWM-69 CHECKS OF A-7D/K WEAPONS DELIVERY SYSTEMS	100
J419 REMOVE OR INSTALL A-7D/K PILOT DISPLAY UNITS (PDU)	100
J416 REMOVE OR INSTALL A-7D/K FLR TRANSMITTERS	100
J421 REMOVE OR INSTALL A-7D/K SIGNAL DATA PROCESSORS (SDP)	100
J406 PERFORM OPERATIONAL CHECKS ON A-7D/K FLR	88
K454 LOAD TAPES IN TAPE READER ON A-7D/K TEST STATIONS	88
J389 PERFORM A-7D/K AN/APM-302 TEST ROUTINES	88
J390 PERFORM A-7D/K AN/APM-304 TEST ROUTINES	88
J413 REMOVE OR INSTALL A-7D/K FLR POWER SUPPLY PROGRAMMERS	88
I354 PERFORM A-7D/K OR AC-130H AN/ASM-395 SELF-TEST TAPE ROUTINES	88
J408 REMOVE OR INSTALL A-7D/K FLR AIR NAVIGATION COMPUTERS	88
J409 REMOVE OR INSTALL A-7D/K FLR ANTENNA RECEIVERS	88
J388 LOAD OPERATIONAL FLIGHT PROGRAMS OR OPERATIONAL TEST PROGRAMS INTO A-7D/K NAVIGATIONAL WEAPON DELIVERY COMPUTERS	75
J392 PERFORM A-7D/K HUD BUILT-IN TEST (BIT) SEQUENCES	75
E221 MAKE ENTRIES ON AFTO FORMS 244 AND 245 (SYSTEM/EQUIPMENT STATUS RECORD)	75
K463 PERFORM MINIMUM PERFORMANCE CHECKS ON A-7D/K NWDC	75
J412 REMOVE OR INSTALL A-7D/K FLR INDICATORS	75
J417 REMOVE OR INSTALL A-7D/K NAVIGATIONAL WEAPON DELIVERY	75
K473 REMOVE OR INSTALL A-7D/K PDU COMPONENTS	75
J414 REMOVE OR INSTALL A-7D/K FLR SET CONTROLS	75
I344 CLEAN MAINTENANCE SHOP AREAS SUCH AS FLOORS OR WALLS	63
I345 CLEAN MAINTENANCE WORK BENCHES, MOCK-UP AREAS, OR TEST STATIONS	63
E223 MAKE ENTRIES ON AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	63
I374 RESEARCH TECHNICAL ORDERS TO IDENTIFY COMPONENTS OR ITEMS OF EQUIPMENT	63
I365 REMOVE OR INSTALL WCS FUSES, LIGHT BULBS, OR TUBES	63

TABLE VIB  
F-4C/D INSTRUCTORS  
(GRP097)

TASK	PERCENT MEMBERS PERFORMING (N=6)
D166 MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	100
D176 SCORE TESTS	100
D135 ADMINISTER TESTS	100
D167 OPERATE AUDIOVISUAL EQUIPMENT	100
D140 CONDUCT FORMAL CLASSROOM TRAINING	83
D142 CONDUCT RESIDENT COURSE CLASSROOM TRAINING	83
D172 PREPARE LESSON PLANS	83
D163 EVALUATE TRAINING PROGRESS OF RESIDENT COURSE STUDENTS	83
D146 COUNSEL TRAINEES ON TRAINING PROGRESS	83
D143 CONDUCT SAFETY TRAINING	83
D144 CONDUCT SECURITY TRAINING	83
V1022 PERFORM F-4C/D RADAR BIT	67
B71 ORIENT NEWLY ASSIGNED PERSONNEL	67
C120 INSPECT PERSONNEL FOR COMPLIANCE WITH MILITARY STANDARDS	67
V1021 PERFORM F-4C/D PSEUDO OR REAR SIGNAL CHECKS USING TS-2059 TEST SETS	67
V1025 PERFORM FUNCTIONAL CHECKS OF F-4C/D AIM-7 MISSILE FIRING CIRCUITS USING AN/AWM-87(DF) TEST SETS	67
V1030 PERFORM FUNCTIONAL CHECKS OF F-4C/D RADAR SUBSYSTEMS USING AN/UPM-145 TEST SETS	67
V1024 PERFORM F-4D LEAD COMPUTING OPTICAL SIGHT SYSTEMS (LCOSS) BIT	67
V1031 PERFORM FUNCTIONAL CHECKS OF F-4D TELEVISION VIDEO SYSTEMS	50
D177 SELECT INDIVIDUALS FOR SPECIALIZED TRAINING	50
V1000 HARMONIZE F-4C/D ELECTRICAL SYNCHRONIZERS USING AN/ APM-130 TEST SETS	50
V1001 HARMONIZE F-4C/D ELECTRICAL SYNCHRONIZERS USING VOLT- METERS OTHER THAN AN/APM-130A	50
B49 COUNSEL SUBORDINATES ON PERSONAL OR MILITARY-RELATED MATTERS	50
W1059 ALIGN F-4C/D ELECTRICAL SYNCHRONIZERS	50
V1004 HARMONIZE F-4C/D PULSE RECEIVER-TRANSMITTERS	50
W1063 ALIGN F-4C/D RADAR ANTENNAS	50
V1003 HARMONIZE F-4C/D INDICATOR CONTROL UNITS (ICU)	50
W1060 ALIGN F-4C/D FORWARD OR AFT AZIMUTH-ELEVATION-RANGE INDICATORS	50
W1061 ALIGN F-4C/D PULSE RECEIVER-TRANSMITTERS	50
W1064 ALIGN F-4C/D RADAR CONTROL POWER SUPPLIES	50

TABLE VII  
MANAGEMENT AND DEBRIEFING PERSONNEL  
(GRP014)

TASK	PERCENT MEMBERS PERFORMING (N=155)
A23 PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS	68
C131 WRITE AIRMAN PERFORMANCE REPORTS	63
B49 COUNSEL SUBORDINATES ON PERSONAL OR MILITARY-RELATED MATTERS	63
E214 MAKE ENTRIES ON AF FORMS 623 AND 623A (ON-THE-JOB TRAINING RECORD)	59
C120 INSPECT PERSONNEL FOR COMPLIANCE WITH MILITARY STANDARDS	59
A8 DETERMINE WORK PRIORITIES	57
B71 ORIENT NEWLY ASSIGNED PERSONNEL	55
B48 COUNSEL SUBORDINATES ON JOB PROGRESSION OR CAREER DEVELOPMENT	54
A4 COORDINATE WORK ACTIVITIES WITH OTHER SECTIONS OR AGENCIES	54
C89 CONDUCT INSPECTIONS	51
E215 MAKE ENTRIES ON AF FORMS 797 (JOB QUALIFICATION STANDARD CONTINUATION)	46
D166 MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	44
A41 SCHEDULE LEAVES, PASSES, OR TDY	44
A43 SCHEDULE WORK ASSIGNMENTS AND PRIORITIES	43
B69 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	43
C133 WRITE RECOMMENDATIONS FOR AWARDS OR DECORATIONS	43
A22 ESTABLISH WORK SCHEDULES	41
A31 PLAN WORK ASSIGNMENTS	40
E226 MAKE ENTRIES ON AFTO FORMS 781A (MAINTENANCE DISCREPANCY AND WORK DOCUMENT)	39
C118 INDORSE AIRMAN PERFORMANCE REPORTS	38
C128 REVIEW MAINTENANCE DATA COLLECTION FORMS	37
A20 ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES	37
A12 DEVELOP SELF-INSPECTION PROGRAMS	37
B87 WRITE CORRESPONDENCE	37
E223 MAKE ENTRIES ON AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	37
C129 REVIEW OR COORDINATE ON OFFICIAL CORRESPONDENCE OR MESSAGES	37
C127 REVIEW EQUIPMENT FORMS OR RECORDS	36
D146 COUNSEL TRAINEES ON TRAINING PROGRESS	35
A36 PREPARE RECALL ROSTERS	35
A1 ASSIGN PERSONNEL TO DUTY POSITIONS	35

**TABLE VIIA**  
**A-10 SHIFT AND SMALL SHOP SUPERVISORS**  
**(GRP184)**

<b>TASK</b>	<b>PERCENT MEMBERS PERFORMING (N=12)</b>
F263 MAINTAIN DUE-IN-FROM-MAINTENANCE LISTS (R26/869-87 OR T-21)	100
C120 INSPECT PERSONNEL FOR COMPLIANCE WITH MILITARY STANDARDS	100
F287 REVIEW SUPPLY DAILY DOCUMENT REGISTERS (D04/804-11)	100
E214 MAKE ENTRIES ON AF FORMS 623 AND 623A (ON-THE-JOB TRAINING RECORD)	100
C131 WRITE AIRMAN PERFORMANCE REPORTS	100
B49 COUNSEL SUBORDINATES ON PERSONAL OR MILITARY-RELATED MATTERS	100
B48 COUNSEL SUBORDINATES ON JOB PROGRESSION OR CAREER DEVELOPMENT	100
E224 MAKE ENTRIES ON AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	100
B77 SUPERVISE WEAPON CONTROL SYSTEMS MECHANICS (AFSC 32152)	92
F286 REVIEW PRIORITY MONITOR REPORTS (D18/820-50)	92
E215 MAKE ENTRIES ON AF FORMS 797 (JOB QUALIFICATION STANDARD CONTINUATION)	92
F239 ATTACH OR ANNOTATE EQUIPMENT STATUS LABELS OR TAGS, SUCH AS DD FORMS 1574 (SERVICEABLE TAG-MATERIEL)	92
F266 MAINTAIN PROPERTY CUSTODIAN AUTHORIZATION/CUSTODY RECEIPT LISTINGS (CA/CRL)	92
D146 COUNSEL TRAINEES ON TRAINING PROGRESS	92
L484 ISOLATE AND CORRECT MALFUNCTIONS WITHIN A-10 TV MONITORS	92
L486 OPERATE A-10 HUD BORESIGHT REFERENCE TOOLS AND THEODOLITES	92
B71 ORIENT NEWLY ASSIGNED PERSONNEL	92
L481 ISOLATE AND CORRECT MALFUNCTIONS WITHIN A-10 PU	92
L485 ISOLATE AND CORRECT MALFUNCTIONS WITHIN A-10 TV CONTROL UNITS	92
F241 COMPLETE AF FORMS 2005 (ISSUE/TURN IN REQUEST)	92
E223 MAKE ENTRIES ON AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	92
E221 MAKE ENTRIES ON AFTO FORMS 244 AND 245 (SYSTEM/EQUIPMENT STATUS RECORD)	92
F270 MAKE ENTRIES ON AF FORMS 2413 (SUPPLY CONTROL LOG)	92
A22 ESTABLISH WORK SCHEDULES	92
L491 PERFORM A-10 PROJECTION UNIT FUNCTIONAL CHECKS	92
L492 PERFORM A-10 TV CONTROL UNIT FUNCTIONAL CHECKS	92
F240 CERTIFY STATUS OF REPARABLE, SERVICEABLE, OR CONDEMNED PARTS	83

TABLE VIIIB  
BRANCH AND LARGE SHOP SUPERVISORS  
(GRP150)

TASK	PERCENT MEMBERS PERFORMING (N=17)
C131 WRITE AIRMAN PERFORMANCE REPORTS	100
C117 EVALUATE WORK SCHEDULES	100
B69 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	100
C120 INSPECT PERSONNEL FOR COMPLIANCE WITH MILITARY STANDARDS	100
C89 CONDUCT INSPECTIONS	100
C128 REVIEW MAINTENANCE DATA COLLECTION FORMS	100
A41 SCHEDULE LEAVES, PASSES, OR TDY	100
B48 COUNSEL SUBORDINATES ON JOB PROGRESSION OR CAREER DEVELOPMENT	100
E214 MAKE ENTRIES ON AF FORMS 623 AND 623A (ON-THE-JOB TRAINING RECORD)	100
C118 INDORSE AIRMAN PERFORMANCE REPORTS	94
A23 PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS	94
C97 EVALUATE COMPLIANCE WITH PERFORMANCE STANDARDS	94
B49 COUNSEL SUBORDINATES ON PERSONAL OR MILITARY-RELATED MATTERS	94
D160 EVALUATE OJT TRAINEES OR TRAINERS	94
C127 REVIEW EQUIPMENT FORMS OR RECORDS	94
A12 DEVELOP SELF-INSPECTION PROGRAMS	94
B68 INITIATE PERSONNEL ACTION REQUESTS, SUCH AS AF FORMS 2095 (ASSIGNMENT/PERSONNEL ACTION)	94
A31 PLAN WORK ASSIGNMENTS	94
A36 PREPARE RECALL ROSTERS	94
A4 COORDINATE WORK ACTIVITIES WITH OTHER SECTIONS OR AGENCIES	94
A6 DETERMINE REQUIREMENTS FOR MAINTENANCE OF EQUIPMENT	94
C103 EVALUATE MAINTENANCE DATA COLLECTION REPORTS	88
C88 ANALYZE WORK LOAD REQUIREMENTS	88
C100 EVALUATE INDIVIDUALS FOR PROMOTIONS, DEMOTIONS, OR RECLASSIFICATIONS	88
D149 DETERMINE OJT TRAINING REQUIREMENTS	88
C133 WRITE RECOMMENDATIONS FOR AWARDS OR DECORATIONS	88
C129 REVIEW OR COORDINATE ON OFFICIAL CORRESPONDENCE OR MESSAGES	88
A20 ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES	88
A8 DETERMINE WORK PRIORITIES	88
B71 ORIENT NEWLY ASSIGNED PERSONNEL	88

**TABLE VIIC**  
**FLIGHTLINE MAINTENANCE MANAGERS**  
**(GRP181)**

<b>TASK</b>	<b>PERCENT MEMBERS PERFORMING (N=8)</b>
A23 PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS	100
A31 PLAN WORK ASSIGNMENTS	100
C118 INDORSE AIRMAN PERFORMANCE REPORTS	100
A22 ESTABLISH WORK SCHEDULES	100
B49 COUNSEL SUBORDINATES ON PERSONAL OR MILITARY-RELATED MATTERS	100
A41 SCHEDULE LEAVES, PASSES, OR TDY	100
C120 INSPECT PERSONNEL FOR COMPLIANCE WITH MILITARY STANDARDS	100
E214 MAKE ENTRIES ON AF FORMS 623 AND 623A (ON-THE-JOB TRAINING RECORD)	100
E215 MAKE ENTRIES ON AF FORMS 797 (JOB QUALIFICATION STANDARD CONTINUATION)	100
B48 COUNSEL SUBORDINATES ON JOB PROGRESSION OR CAREER DEVELOPMENT	100
B71 ORIENT NEWLY ASSIGNED PERSONNEL	100
B55 DIRECT FLIGHTLINE MAINTENANCE	88
B43 SCHEDULE WORK ASSIGNMENTS AND PRIORITIES	88
A8 DETERMINE WORK PRIORITIES	88
A20 ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES	88
C131 WRITE AIRMAN PERFORMANCE REPORTS	88
C128 REVIEW MAINTENANCE DATA COLLECTION FORMS	88
A1 ASSIGN PERSONNEL TO DUTY POSITIONS	88
A6 DETERMINE REQUIREMENTS FOR MAINTENANCE OF EQUIPMENT	88
C133 WRITE RECOMMENDATIONS FOR AWARDS OR DECORATIONS	88
A2 ASSIGN SPONSORS FOR NEWLY ASSIGNED PERSONNEL	88
A5 DETERMINE PERSONNEL REQUIREMENTS	88
A4 COORDINATE WORK ACTIVITIES WITH OTHER SECTIONS OR AGENCIES	75
D160 EVALUATE OJT TRAINEES OR TRAINERS	75
A36 PREPARE RECALL ROSTERS	75
E185 MAINTAIN COUNSELING FORMS	75
D137 ASSIGN ON-THE-JOB TRAINING (OJT) TRAINERS OR SUPERVISORS	75
C130 SERVE ON PROMOTION, CLASSIFICATION, OR AWARDS BOARDS	75
B86 SUPERVISE WEAPON CONTROL SYSTEMS TECHNICIANS (AFSC 32172Q)	63
E226 MAKE ENTRIES ON AFTO FORMS 781A (MAINTENANCE DISCREPANCY AND WORK DOCUMENT)	63



TABLE VIID  
FLIGHTLINE CHIEFS  
(GRP193)

TASK	PERCENT MEMBERS PERFORMING (N=5)
A41 SCHEDULE LEAVES, PASSES, OR TDY	100
C131 WRITE AIRMAN PERFORMANCE REPORTS	100
C118 INDORSE AIRMAN PERFORMANCE REPORTS	100
C120 INSPECT PERSONNEL FOR COMPLIANCE WITH MILITARY STANDARDS	100
C128 REVIEW MAINTENANCE DATA COLLECTION FORMS	100
E214 MAKE ENTRIES ON AF FORMS 623 AND 623A (ON-THE-JOB TRAINING RECORD)	100
B49 COUNSEL SUBORDINATES ON PERSONAL OR MILITARY-RELATED MATTERS	100
B48 COUNSEL SUBORDINATES ON JOB PROGRESSION OR CAREER DEVELOPMENT	100
E215 MAKE ENTRIES ON AF FORMS 797 (JOB QUALIFICATION STANDARD CONTINUATION)	100
D137 ASSIGN ON-THE-JOB TRAINING (OJT) TRAINERS OR SUPERVISORS	100
B69 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	100
D146 COUNSEL TRAINEES ON TRAINING PROGRESS	100
E185 MAINTAIN COUNSELING FORMS	100
C133 WRITE RECOMMENDATIONS FOR AWARDS OR DECORATIONS	100
B71 ORIENT NEWLY ASSIGNED PERSONNEL	100
D166 MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	100
C103 EVALUATE MAINTENANCE DATA COLLECTION REPORTS	100
C129 REVIEW OR COORDINATE ON OFFICIAL CORRESPONDENCE OR MESSAGES	100
I356 PERFORM FOREIGN OBJECT INSPECTIONS	100
E223 MAKE ENTRIES ON AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	100
E224 MAKE ENTRIES ON AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	100
E229 MAKE ENTRIES ON AFTO FORMS 781K (AEROSPACE VEHICLE INSPECTION AND DELAYED DISCREPANCY DOCUMENT)	100
G296 OPERATE AEROSPACE GROUND EQUIPMENT (AGE) SUCH AS POWER UNITS, HEATERS, OR LIGHT CARTS	100
E220 MAKE ENTRIES ON AFTO FORMS 22 (TECHNICAL ORDER SYSTEM PUBLICATION IMPROVEMENT REPORT AND REPLY)	100
B44 ADJUST DAILY MAINTENANCE PLANS TO MEET OPERATIONAL COMMITMENTS	80
A31 PLAN WORK ASSIGNMENTS	80
A43 SCHEDULE WORK ASSIGNMENTS AND PRIORITIES	80
A4 COORDINATE WORK ACTIVITIES WITH OTHER SECTIONS OR AGENCIES	80

**TABLE VIIE**  
**SUPPORT SECTION SUPERVISORS**  
**(GRP132)**

<b>TASK</b>	<b>PERCENT MEMBERS PERFORMING (N=7)</b>
F274 MAKE ENTRIES ON AF FORMS 601 (EQUIPMENT ACTION REQUEST)	100
F286 REVIEW PRIORITY MONITOR REPORTS (D18/820-50)	100
F267 MAKE ENTRIES ON AF FORMS 126 (CUSTODIAN REQUEST LOG)	100
F266 MAINTAIN PROPERTY CUSTODIAN AUTHORIZATION/CUSTODY RECEIPT LISTINGS (CA/CRL)	100
F268 MAKE ENTRIES ON AF FORMS 1297 (TEMPORARY ISSUE RECEIPT)	100
F257 INVENTORY EQUIPMENT, TOOLS, OR SUPPLIES OTHER THAN COMPOSITE TOOL KITS (CTK)	100
F281 PREPARE LETTERS OF JUSTIFICATION FOR SUPPLY RELATED MATTERS	100
B49 COUNSEL SUBORDINATES ON PERSONAL OR MILITARY-RELATED MATTERS	100
F250 EVALUATE EQUIPMENT ALLOWANCE OR AUTHORIZATION CHANGES	100
F288 REVIEW SUPPLY OR EQUIPMENT REQUIREMENTS WITH ALLOWANCE AND AUTHORIZATION (A&A) OFFICE	86
F284 RESEARCH MICROFICHE FILES FOR SUPPLY REQUISITION DATA	86
F287 REVIEW SUPPLY DAILY DOCUMENT REGISTERS (D04/804-11)	86
F277 MAKE ENTRIES ON DD FORMS 1348-1 (DOD SINGLE LINE ITEM RELEASE/RECEIPT DOCUMENT)	86
C89 CONDUCT INSPECTIONS	86
F258 ISSUE SUPPLIES AND EQUIPMENT	86
F244 COORDINATE WITH BASE SUPPLY ON OBTAINING PARTS	86
F259 LOG TURN-IN OF SUPPLIES AND EQUIPMENT	86
C120 INSPECT PERSONNEL FOR COMPLIANCE WITH MILITARY STANDARDS	86
F256 IDENTIFY SUPPLY PROBLEMS	86
A7 DETERMINE REQUIREMENTS FOR SPACE, EQUIPMENT, OR SUPPLIES	86
F279 PREPARE DOCUMENTATION TO TURN IN SURPLUS PROPERTY	86
F241 COMPLETE AF FORMS 2005 (ISSUE/TURN IN REQUEST)	86
F239 ATTACH OR ANNOTATE EQUIPMENT STATUS LABELS OR TAGS, SUCH AS DD FORMS 1574 (SERVICEABLE TAG-MATERIEL)	86
A23 PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, BRIEFINGS, CONFERNECES, OR WORKSHOPS	86
F242 COMPLETE DD FORMS 1348-6 (NON-NSN REQUISITION (MANUAL))	86
A4 COORDINATE WORK ACTIVITIES WITH OTHER SECTIONS OR AGENCIES	86
E195 MAINTAIN PUBLICATION LIBRARIES	71
F247 ESTABLISH REQUIREMENTS FOR EQUIPMENT OR TOOLS	71
E217 MAKE ENTRIES ON AFTO FORMS 110 AND 110A (TECHNICAL ORDER DISTRIBUTION RECORD)	71
F270 MAKE ENTRIES ON AF FORMS 2413 (SUPPLY CONTROL LOG)	71

TABLE VIIF  
STAFF-LEVEL SUPERVISORS  
(GRP103)

TASK	PERCENT MEMBERS PERFORMING (N=6)
B69 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	100
A23 PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS	100
C129 REVIEW OR COORDINATE ON OFFICIAL CORRESPONDENCE OR MESSAGES	100
C120 INSPECT PERSONNEL FOR COMPLIANCE WITH MILITARY STANDARDS	100
A12 DEVELOP SELF-INSPECTION PROGRAMS	100
B49 COUNSEL SUBORDINATES ON PERSONAL OR MILITARY-RELATED MATTERS	100
A5 DETERMINE PERSONNEL REQUIREMENTS	100
A1 ASSIGN PERSONNEL TO DUTY POSITIONS	100
B87 WRITE CORRESPONDENCE	83
C91 EDIT OFFICIAL CORRESPONDENCE OR MESSAGES	83
B76 SUPERVISE MILITARY PERSONNEL IN CAREER FIELDS OTHER THAN AFSC 321X2	83
C118 INDORSE AIRMAN PERFORMANCE REPORTS	83
C131 WRITE AIRMAN PERFORMANCE REPORTS	83
A38 REVIEW DRAFTS OF REGULATIONS, MANUALS, OR OTHER DIRECTIVES	83
C133 WRITE RECOMMENDATIONS FOR AWARDS OR DECORATIONS	83
C126 REVIEW AND EDIT RECOMMENDATIONS FOR AWARDS OR DECORATIONS	83
B60 DRAFT INPUTS TO HIGHER HEADQUARTERS DIRECTIVES	83
B48 COUNSEL SUBORDINATES ON JOB PROGRESSION OR CAREER DEVELOPMENT	83
A19 ESTABLISH ORGANIZATIONAL POLICIES, OPERATING INSTRUCTIONS (OI), OR STANDING OPERATING PROCEDURES (SOP)	83
B71 ORIENT NEWLY ASSIGNED PERSONNEL	83
B83 SUPERVISE WEAPON CONTROL SYSTEMS TECHNICIANS (AFSC 32172A)	67
A4 COORDINATE WORK ACTIVITIES WITH OTHER SECTIONS OR AGENCIES	67
C93 EVALUATE ADMINISTRATIVE PROBLEMS	67
C134 WRITE STAFF STUDIES, SURVEYS, OR SPECIAL REPORTS, OTHER THAN TRAINING REPORTS	67
C89 CONDUCT INSPECTIONS	67
C130 SERVE ON PROMOTION, CLASSIFICATION, OR AWARDS BOARDS	67
A7 DETERMINE REQUIREMENTS FOR SPACE, EQUIPMENT, OR SUPPLIES	67
B68 INITIATE PERSONNEL ACTION REQUESTS, SUCH AS AF FORMS 2095 (ASSIGNMENT/PERSONNEL ACTION)	67
B45 COMPILE INFORMATION FOR REPORTS OR STAFF STUDIES	67
A20 ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES	67

TABLE VIIG

STAFF NCOs  
(GRP100)

TASK	PERCENT MEMBERS PERFORMING (N=5)
B87 WRITE CORRESPONDENCE	100
C101 EVALUATE INSPECTION REPORTS OR PROCEDURES	100
B45 COMPILE INFORMATION FOR REPORTS OR STAFF STUDIES	100
A23 PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS	100
C89 CONDUCT INSPECTIONS	100
D159 EVALUATE EFFECTIVENESS OF TRAINING PROGRAMS	80
C91 EDIT OFFICIAL CORRESPONDENCE OR MESSAGES	80
C129 REVIEW OR COORDINATE ON OFFICIAL CORRESPONDENCE OR MESSAGES	80
A12 DEVELOP SELF-INSPECTION PROGRAMS	80
B71 ORIENT NEWLY ASSIGNED PERSONNEL	80
C90 CONDUCT STAFF ASSISTANCE VISITS	80
B46 CONDUCT BRIEFINGS	80
C134 WRITE STAFF STUDIES, SURVEYS, OR SPECIAL REPORTS, OTHER THAN TRAINING REPORTS	60
A18 ESTABLISH INSPECTION PROCEDURES	60
A27 PLAN OR PREPARE BRIEFINGS	60
A38 REVIEW DRAFTS OF REGULATIONS, MANUALS, OR OTHER DIRECTIVES	60
A16 DRAFT SUPPLEMENTS OR CHANGES TO GOVERNING DIRECTIVES	60
B60 DRAFT INPUTS TO HIGHER HEADQUARTERS DIRECTIVES	60
D169 PERFORM AS TRAINING ADVISOR AT STAFF LEVEL	40
E237 PREPARE RECORDS OR GRAPHS, OTHER THAN TRAINING	40
D162 EVALUATE TRAINING METHODS OR TECHNIQUES	40
D161 EVALUATE TRAINING MATERIALS OR AIDS	40
B69 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	40
A4 COORDINATE WORK ACTIVITIES WITH OTHER SECTIONS OR AGENCIES	40
C93 EVALUATE ADMINISTRATIVE PROBLEMS	40
C92 EVALUATE ADMINISTRATIVE FORMS, FILES, OR PROCEDURES	40
C112 EVALUATE SECURITY PROGRAMS	40
D136 ADVISE UNIT STAFF PERSONNEL ON TRAINING MATTERS	40
A17 ESTABLISH DOCUMENTATION FILES	40
C120 INSPECT PERSONNEL FOR COMPLIANCE WITH MILITARY STANDARDS	40

TABLE VIIH  
QUALITY ASSURANCE PERSONNEL  
(GRP146)

TASK	PERCENT MEMBERS PERFORMING (N=10)
C123 PERFORM POST-MAINTENANCE INSPECTIONS OF EQUIPMENT	100
C89 CONDUCT INSPECTIONS	90
E207 MAKE ENTRIES ON AF FORMS 2420 (QUALITY CONTROL INSPECTION SUMMARY)	90
E226 MAKE ENTRIES ON AFTO FORMS 781A (MAINTENANCE DISCREPANCY AND WORK DOCUMENT)	90
E206 MAKE ENTRIES ON AF FORMS 2419 (ROUTING AND REVIEW OF QUALITY CONTROL REPORTS)	80
C97 EVALUATE COMPLIANCE WITH PERFORMANCE STANDARDS	80
B64 IMPLEMENT QUALITY CONTROL PROGRAMS	80
C114 EVALUATE TECHNICAL ORDER IMPROVEMENT REPORTS	80
C124 PERFORM SAFETY INSPECTIONS OF EQUIPMENT OR FACILITIES	70
C125 PERFORM WEAPON CONTROL SYSTEMS ACCEPTANCE INSPECTIONS	70
C127 REVIEW EQUIPMENT FORMS OR RECORDS	70
C110 EVALUATE QUALITY CONTROL/ASSURANCE PROCEDURES	70
C121 INVESTIGATE ACCIDENTS OR INCIDENTS	70
A23 PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS	70
B45 COMPILE INFORMATION FOR REPORTS OR STAFF STUDIES	60
C120 INSPECT PERSONNEL FOR COMPLIANCE WITH MILITARY STANDARDS	60
B87 WRITE CORRESPONDENCE	50
B54 DIRECT EVALUATIONS OF PERSONNEL	50
C94 EVALUATE AIRCRAFT INSPECTION WORKCARDS	50
C113 EVALUATE SUGGESTIONS	50
E220 MAKE ENTRIES ON AFTO FORMS 22 (TECHNICAL ORDER SYSTEM PUBLICATION IMPROVEMENT REPORT AND REPLY)	50
A38 REVIEW DRAFTS OF REGULATIONS, MANUALS, OR OTHER DIRECTIVES	50
C90 CONDUCT STAFF ASSISTANCE VISITS	40
I350 INSPECT AIRCRAFT FOR GROUND SAFETY SUCH AS PLACEMENT OF WHEEL CHOCKS OR PINS	40
C129 REVIEW OR COORDINATE ON OFFICIAL CORRESPONDENCE OR MESSAGES	40
C101 EVALUATE INSPECTION REPORTS OR PROCEDURES	40
C116 EVALUATE UNSATISFACTORY REPORTS OR MATERIAL DEFICIENCY REPORTS	40
A18 ESTABLISH INSPECTION PROCEDURES	40
C98 EVALUATE DATA ON DEVELOPMENT OR MODIFICATION OF EQUIPMENT	40
C134 WRITE STAFF STUDIES, SURVEYS, OR SPECIAL REPORTS, OTHER THAN TRAINING REPORTS	40

TABLE VIII  
F-106 AIRCREW DEBRIEFERS  
(GRP082)

TASK	PERCENT MEMBERS PERFORMING (N=5)
I348 DEBRIEF AIRCREWS	100
E226 MAKE ENTRIES ON AFTO FORMS 781A (MAINTENANCE DISCREPANCY AND WORK DOCUMENT)	100
E225 MAKE ENTRIES ON AFTO FORMS 781 (AEROSPACE VEHICLE FLIGHT DATA DOCUMENT)	100
E228 MAKE ENTRIES ON AFTO FORMS 781H (AEROSPACE VEHICLE FLIGHT STATUS AND MAINTENANCE DOCUMENT)	100
E189 MAINTAIN FLYING RECORDS	80
E227 MAKE ENTRIES ON AFTO FORMS 781C (AVIONICS CONFIGURATION AND LOAD STATUS DOCUMENT)	80
I344 CLEAN MAINTENANCE SHOP AREAS SUCH AS FLOORS OR WALLS	80
E237 PREPARE RECORDS OR GRAPHS, OTHER THAN TRAINING	80
E196 MAINTAIN SECURITY FORMS ON SAFES, RECORDS, OR ROOMS	80
E232 MAKE ENTRIES ON RECORDS OF EVALUATIONS	60
H330 PACK INDIVIDUAL MOBILITY EQUIPMENT FOR DEPLOYMENTS	60
H331 PARTICIPATE IN PREDEPLOYMENT MOBILITY BRIEFINGS	60
E229 MAKE ENTRIES ON AFTO FORMS 781K (AEROSPACE VEHICLE INSPECTION AND DELAYED DISCREPANCY DOCUMENT)	60
B45 COMPILE INFORMATION FOR REPORTS OR STAFF STUDIES	40
I374 RESEARCH TECHNICAL ORDERS TO IDENTIFY COMPONENTS OR ITEMS OF EQUIPMENT	40
B53 DIRECT DEVELOPMENT OR MAINTENANCE OF STATUS BOARDS, GRAPHS, OR CHARTS	40
T908 ISOLATE MALFUNCTIONS WITHIN F-106 ARMAMENT SUBSYSTEM LRU	40
A11 DEVELOP ORGANIZATIONAL OR FUNCTIONAL CHARTS	40
E186 MAINTAIN EQUIPMENT OR AIRCRAFT STATUS REPORTS	40
A8 DETERMINE WORK PRIORITIES	40
D166 MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	40
E188 MAINTAIN FILES OF CLASSIFIED MATERIAL OR MESSAGES	40
E214 MAKE ENTRIES ON AF FORMS 623 AND 623A (ON-THE-JOB TRAINING RECORD)	40
A23 PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS	40
A4 COORDINATE WORK ACTIVITIES WITH OTHER SECTIONS OR AGENCIES	40
A6 DETERMINE REQUIREMENTS FOR MAINTENANCE OF EQUIPMENT	40
E213 MAKE ENTRIES ON AF FORMS 457 (USAF HAZARD REPORT)	40
D141 CONDUCT OJT	20
S846 PERFORM OPERATIONAL CHECKS ON F-106 ARMAMENT SUBSYSTEM LRU	20

TABLE VIIJ

F-106 DEBRIEFING SECTION SUPERVISORS  
(GRP136)

<b>TASK</b>	<b>PERCENT MEMBERS PERFORMING (N=6)</b>
I348 DEBRIEF AIRCREWS	100
E228 MAKE ENTRIES ON AFTO FORMS 781H (AEROSPACE VEHICLE FLIGHT STATUS AND MAINTENANCE DOCUMENT)	100
E226 MAKE ENTRIES ON AFTO FORMS 781A (MAINTENANCE DISCREPANCY AND WORK DOCUMENT)	100
A22 ESTABLISH WORK SCHEDULES	100
C131 WRITE AIRMAN PERFORMANCE REPORTS	100
A23 PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS	100
A8 DETERMINE WORK PRIORITIES	83
A43 SCHEDULE WORK ASSIGNMENTS AND PRIORITIES	83
B78 SUPERVISE WEAPON CONTROL SYSTEMS MECHANICS (AFSC 32152A)	83
E214 MAKE ENTRIES ON AF FORMS 623 AND 623A (ON-THE-JOB TRAINING RECORD)	83
D141 CONDUCT OJT	83
B48 COUNSEL SUBORDINATES ON JOB PROGRESSION OR CAREER DEVELOPMENT	83
E215 MAKE ENTRIES ON AF FORMS 797 (JOB QUALIFICATION STANDARD CONTINUATION)	83
A1 ASSIGN PERSONNEL TO DUTY POSITIONS	83
B49 COUNSEL SUBORDINATES ON PERSONAL OR MILITARY-RELATED MATTERS	83
B71 ORIENT NEWLY ASSIGNED PERSONNEL	83
E237 PREPARE RECORDS OR GRAPHS, OTHER THAN TRAINING	67
C106 EVALUATE PERFORMANCE OF IN-FLIGHT CREWS	67
E225 MAKE ENTRIES ON AFTO FORMS 781 (AEROSPACE VEHICLE FLIGHT DATA DOCUMENT)	67
D166 MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	67
D160 EVALUATE OJT TRAINEES OR TRAINERS	67
A31 PLAN WORK ASSIGNMENTS	67
D146 COUNSEL TRAINEES ON TRAINING PROGRESS	67
A41 SCHEDULE LEAVES, PASSES, OR TDY	67
E185 MAINTAIN COUNSELING FORMS	67
A5 DETERMINE PERSONNEL REQUIREMENTS	67
D167 OPERATE AUDIOVISUAL EQUIPMENT	50
A7 DETERMINE REQUIREMENTS FOR SPACE, EQUIPMENT, OR SUPPLIES	50
E196 MAINTAIN SECURITY FORMS ON SAFES, RECORDS, OR ROOMS	50
C120 INSPECT PERSONNEL FOR COMPLIANCE WITH MILITARY STANDARDS	50

END

ARMED

DITIC





AD-A146 572

WEAPON CONTROL SYSTEMS CAREER LADDERS AFSC  
321X2/A/C/P/Q(U) AIR FORCE OCCUPATIONAL MEASUREMENT  
CENTER RANDOLPH AFB TX E R WALLACE AUG 84

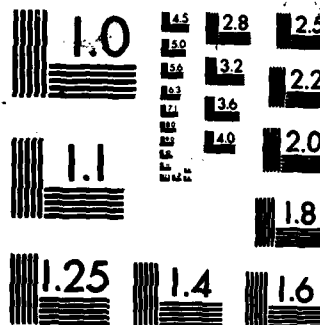
44

UNCLASSIFIED

F/G 5/9

NL





MICROCOPY RESOLUTION TEST CHART  
NATIONAL BUREAU OF STANDARDS-1963-A

# SUPPLEMENTARY

# INFORMATION



DEPARTMENT OF THE AIR FORCE  
USAF OCCUPATIONAL MEASUREMENT CENTER (ATC)  
RANDOLPH AIR FORCE BASE, TX 78150

REPLY TO  
ATTN OF: OMYO

SUBJECT: Correction to Occupational Survey Report, AFS 321X2A/C/P/Q, August 1984

TO: All OSR Addressees

Some information on Figure 2 in subject report was inadvertently omitted or was incorrect. Please replace pages 63 and 64 (attached) in your copy of the OSR.

*Charles D. Gorman*  
CHARLES D. GORMAN, Major, USAF  
Chief, USAF Airman Analysis Section

1 Atch  
OSR 321X2A/C/P/Q Insert  
(Pages 63 and 64)

TABLE 28

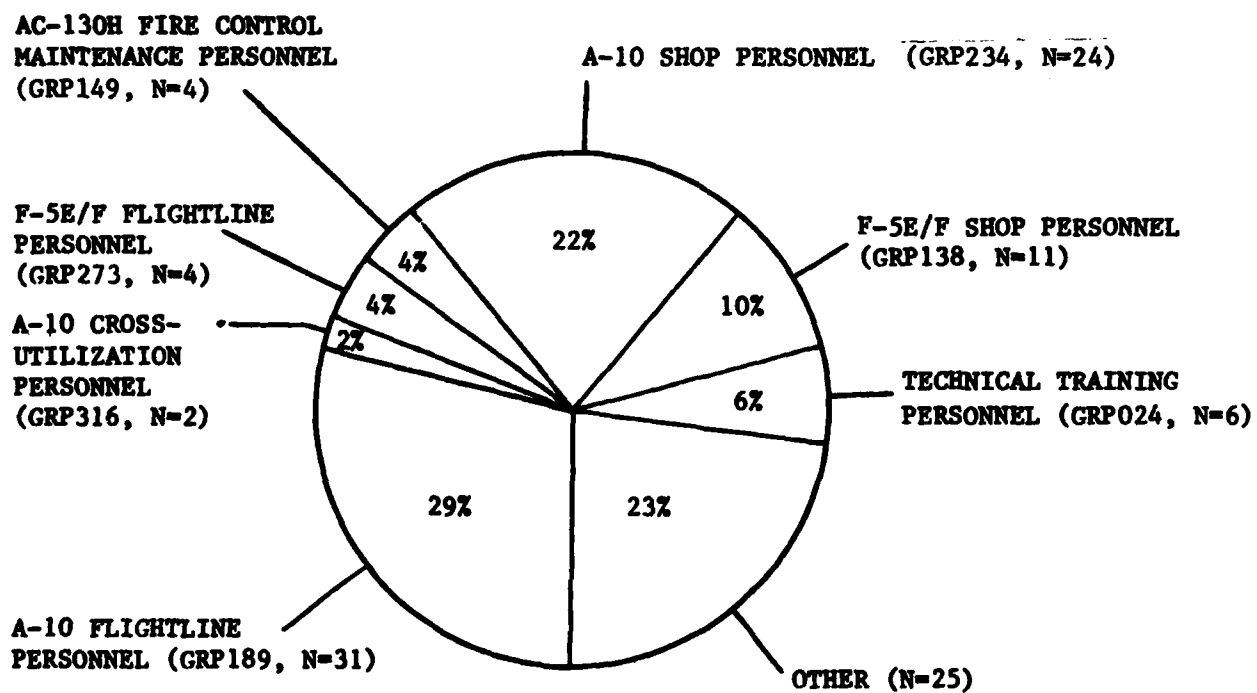
AIRCRAFT SYSTEMS MAINTAINED BY  
321X2 AND 321X2Q FIRST-TERMERS

<u>AIRCRAFT SYSTEM</u>	<u>PERCENT OF FIRST-TERMERS MAINTAINING</u>	
	<u>321X2</u>	<u>321X2Q</u>
A-10A	69	1*
F-5E	17	0
F-5F	11	0
AC-130H	10	0
F-4E	10*	93
F-4G	0	35

\* These personnel worked in combined units where they maintained both A-10 and F-4 systems

FIGURE 2

DISTRIBUTION OF 321X2 FIRST-TERMERS ACROSS JOB GROUPS  
(N=107)



END

1-87

DTIC